

OCTOBER 1955

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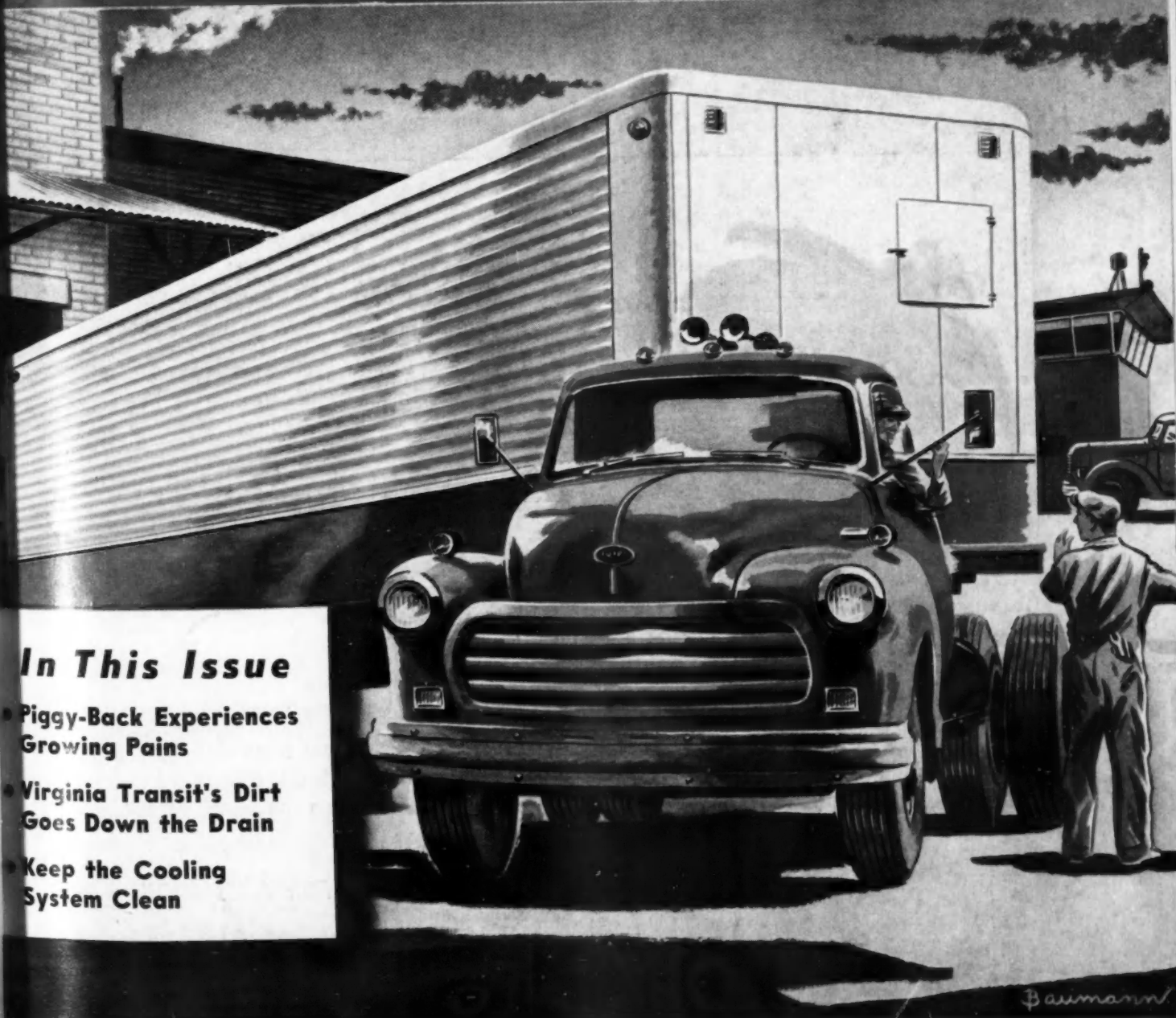
OCT 1955

TRANSPORTATION
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COMMERCIAL CAR JOURNAL

A CHILTON PUBLICATION

THE MAGAZINE FOR TRUCK AND BUS FLEET OPERATORS



In This Issue

- Piggy-Back Experiences Growing Pains
- Virginia Transit's Dirt Goes Down the Drain
- Keep the Cooling System Clean

September, 1955



"Mile-after-mile, day-after-day economy ...with our Dodge trucks"

"It's not just the low initial cost that keeps us sold on Dodge trucks—it's their mile-after-mile and day-after-day economy of operation that counts even more.

"The fact that we seldom lose a minute in down time is another big profit factor. If a truck breaks down on a job like this 'redesigning' project at the Falls, it costs us important money. We find that Dodge trucks help us keep the work going on schedule."

To remove an unsafe overhang from Niagara Falls, the Walter S. Johnson Company first had to divert the flow of the river. A tough, wet job—calling for their most rugged units—Dodge trucks, of course!

Whatever *your* type of operation, Dodge trucks can reduce your costs, build your profits. And remember—this year Dodge truck power is *up* and Dodge truck prices are *down* . . . lowest of all on many popular models!

JOHN G. JOHNSON,
Vice-President
Walter S. Johnson
Building Co., Inc.
Niagara Falls,
New York



DODGE

Job-Rated

TRUCKS

WITH THE FORWARD LOOK



Del





Delivery Economies for You!



"The Savings effected by our Olson Aluminum Bodies will exceed the first cost for both chassis and body within 5 years. That way, we get our trucks for nothing." Lyman Wilbur, Fleet Supervisor, My Bread Baking Co., New Bedford, Mass.

Staunton Laundry writes: "To date we have not spent one cent on maintenance of the body, other than the original paint job done 5 years ago."

A new user, The Ohio Valley Baking Co., says: "Our first Olson Body is already saving us \$55 a year in license fees and 5 gallons of gasoline per day on its route."

A host of other successful fleet operators from the Atlantic to the Pacific use Olson Aluminum Bodies by Grumman because they weigh less, dent less, corrode less, depreciate less and thus pay for themselves through Savings.

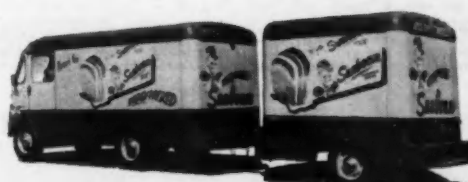
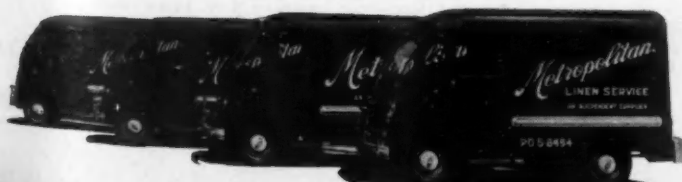
Grumman's contribution is a Quarter Century of aluminum "know-how" in building fighter planes and aluminum truck bodies. No imitator can match Grumman skill. That is why you can get imitations quickly, while the demand for Olson Bodies exceeds the increased supply. Olson superiority is worth waiting for . . . worth ordering ahead thru your Ford, Chevrolet or GMC dealer.

For your pocketbook's sake

**SEE YOUR DEALER
TODAY**

or write us for catalog containing a summary of "Today's Economics of Route Deliveries" — free on request.

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THIS MONTH'S FEATURES

Freight by Truck—It's Big Business.....66

For-hire carriers render a service demanded by shippers totalling \$5 billion worth of transportation yearly.

Piggy-Back Experiences Growing Pains.....68

From their use of the service, Spector, Cooper-Jarrett and Mid-States analyze its advantages and disadvantages.

Southern Penn Builds Rotary Bus Washer.....71

Running a bus through, starts and stops an automatic spray-detergent-rinse cycle that does a job in 10 min.

All Dirt Goes Down the Drain.....72

Virginia Transit speeds repair and parts salvage by running bus components through a tile-lined cleaning room.

LP Gas Saves \$300 per Year per Truck.....74

Riley Cartage spent about \$5200 to convert 13 trucks to LP gas, saves \$4000 a year in fuel, oil, overhaul costs.

Keep the Cooling System Clean.....76

Here's how timely flushing, use of good inhibitors and periodic preventive maintenance lengthen engine life.

Air Starters Stop Troubles.....80

Carolina Motor Freight shows how they cut maintenance costs, reduce starting problems in its diesel fleet.

FWD Offers 6x4 Road Tractor.....82

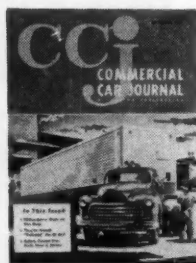
One-man cab model measures 59 in. from front bumper to back-of-cab, gets up to 1800 lb more payload says maker.

"Yard Doctor" Speeds Trailer Service.....83

Pacific Intermountain Express takes the shop to the trailer, ups equipment utilization, saves shop space.

New International S-Line.....90

It includes models up to 33,000 lb GVW. R-Line and 400 series are retained from Model No. R-185 and up.



For-hire truck fleets serve thousands of communities across the nation, bring consumers the many things they eat, wear and use in steadily increasing volume. For example, this year's second quarter ATA tonnage index hit a record high of 172, ten points above the previous second quarter high of 162 reached in 1953. This is typical of the vigorous growth of the for-hire truck fleets whose story, "Freight by Truck—It's Big Business," is reported on page 66.

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COMMERCIAL CAR JOURNAL

with which is combined Operation & Maintenance

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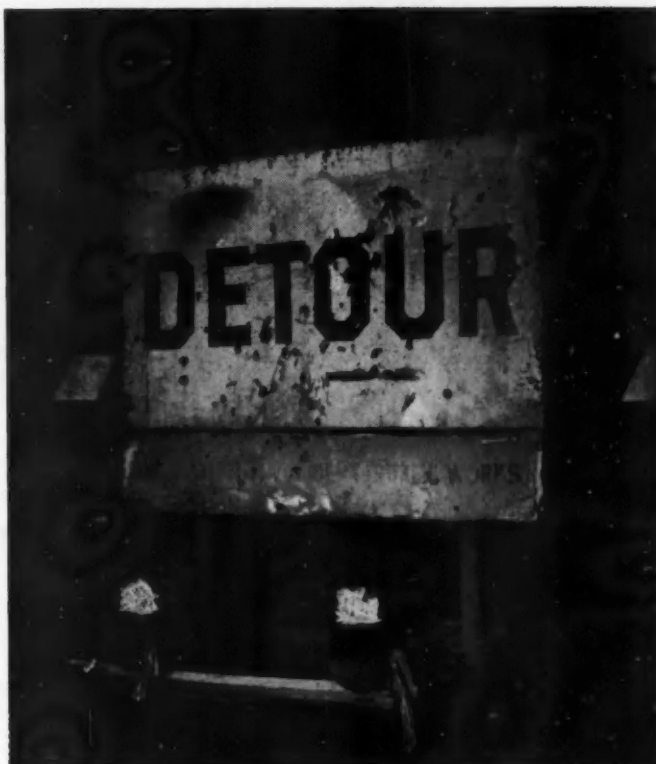
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COMMERCIAL CAR JOURNAL, October, 1955



There's no such thing as "normal conditions" in the fleet business

Detour! From 50 m.p.h. your truck shifts to moan and groan driving on a lonely, unlit farm road.

It's great to know that no matter where a detour leads, your trucks are equipped with Blue Streak heavy-duty ignition parts built to keep rolling even under the toughest conditions.

Thousands of fleet operators already realize that the few pennies more it costs to install Blue Streak heavy-duty parts don't really matter when a deadline, a payload, and their own reputations are at stake. And savings in "down time" and operating costs due to Blue Streak's dependable performance are often many times the cost of the parts themselves.

Make it a point to insist on Blue Streak whenever you install voltage regulators, contacts, coils, condensers, relays, dimmer switches, wire and battery cable. Write STANDARD MOTOR PRODUCTS, Inc., 37-18 Northern Boulevard., Long Island City 1, New York.



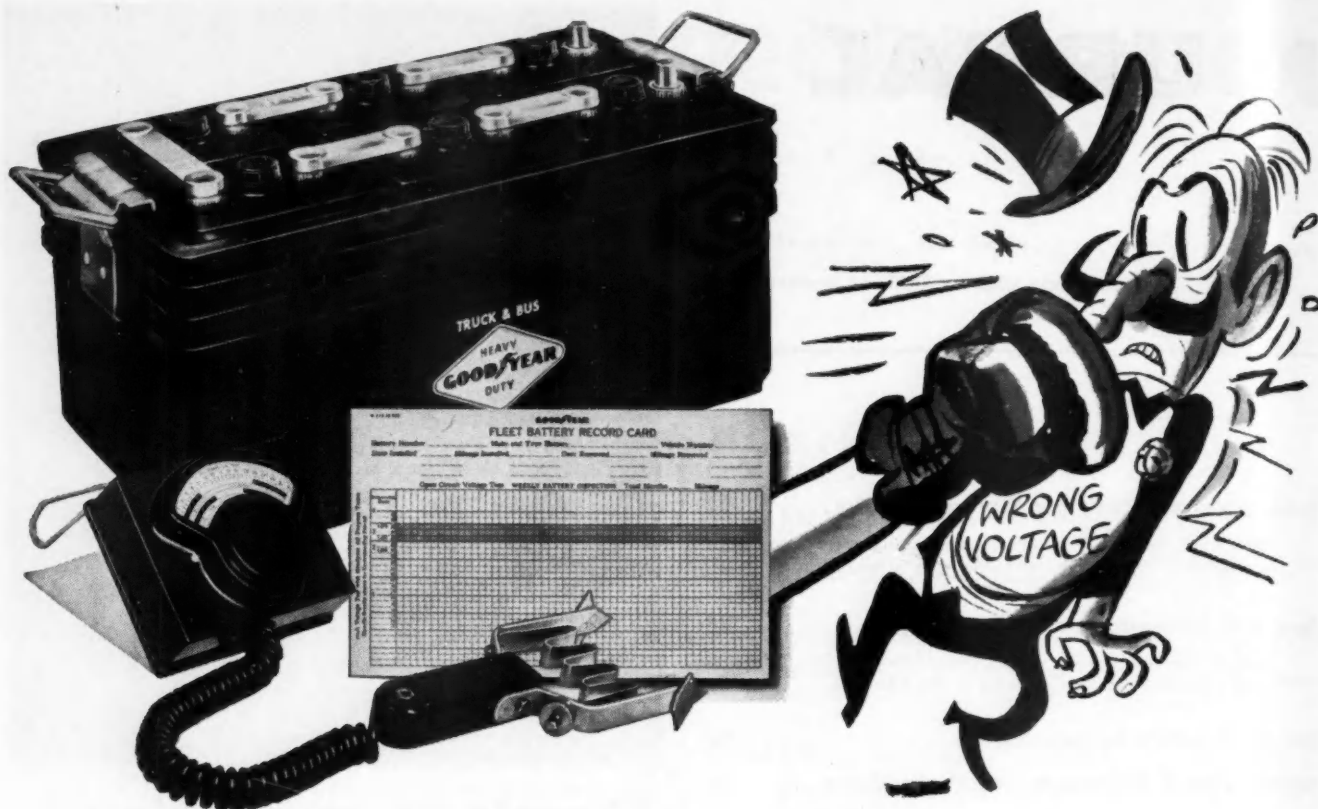
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October, 1955



"Beat the Daylights" out of battery costs —with Goodyear's Fleet Battery Maintenance Plan

This free plan offers you the surest way there is to knock out the Number 1 Battery Killer — improper voltage regulation. It does it with an easy to follow two-minute-a-week check on battery charge.

At each watering, batteries are load-tested with the Goodyear All-Purpose Tester (*above*) for state of charge. And the findings go on the Fleet Battery Record Card—one for each battery. When the marks go above or below the stripe you see on the card, your maintenance man knows voltage is too high or low and needs prompt adjustment.

By helping you stop improper voltage regulation in time, the Goodyear Fleet Battery Maintenance Plan enables you to get longer battery life—longer electrical system service—and fewer road delays.

And your savings continue to grow when you use this sure-fire plan with Goodyear Heavy-Duty Truck and Bus or Diesel-type batteries. Better mail in the coupon below for the full story right away.

Goodyear, Battery Department, Akron 16, Ohio

GOOD YEAR

THE GREATEST NAME IN RUBBER

**SEND FOR FREE
BOOKLET TODAY!**

THE GOODYEAR TIRE & RUBBER COMPANY, INC.
Dept. J-7912, Akron 16, Ohio

Please send me a copy of the Goodyear Fleet Battery Maintenance Manual.

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The OVERLOAD

E D I T O R I A L C O M M E N T

Wanted: A Little More Positive Thinking

A PRETTY quick way to feel the pulse of an industry is to scan the daily barrage of "literature" that flows across a business magazine editor's desk. From the standpoint of volume alone, no subject in recent weeks has produced more wordage than the Cabinet Committee Report on proposals to revise the Interstate Commerce Act.

It makes us rather proud that we jumped the gun on the hearings last month with a very complete analysis entitled "They're Gonna 'Railroad' the IC Act." (Sept., page 74.) It doesn't make easy reading. It surely is not glamorous. But it does state the case concisely and well.

The intense continuing interest calls for some additional comment, this time with a bit more editorial freedom. Of the ten basic elements in the committee's report, two have truck interests on a thin line of defense.

One greatly limits the ICC's rate making powers to "not less than a reasonable minimum . . . nor more than a reasonable maximum." The other provides for regulation "without special restrictions . . . on individual modes of transport."

Without going into detail, our best legal advice points out that the new rate provisions would give the railroads almost a free hand in selective rate making. And the carefully worded "individual mode of transport" phrase means simply that railroads may operate truck lines just about anywhere they please.

Obviously, the railroads are very happy about all this. Significant are the two-page advertise-

ments of the Assn. of American Railroads appearing in current news magazines (i.e., *Time*, Sept. 12, pages 60-61). Talking directly to the public they point out how much better off everybody will be if the railroads have a free hand in every transportation pie.

Equally obvious is the fact that truck interests are unhappy. Yet the only redress to date has been to once again cry "wolf" to keep the unsavory character from the door. It's not a pleasant task, or one that has been too successful. For instance, the truckers cried wolf about:

The New York Mileage Tax . . . and lost

The Ohio Axle Mile Tax . . . and lost

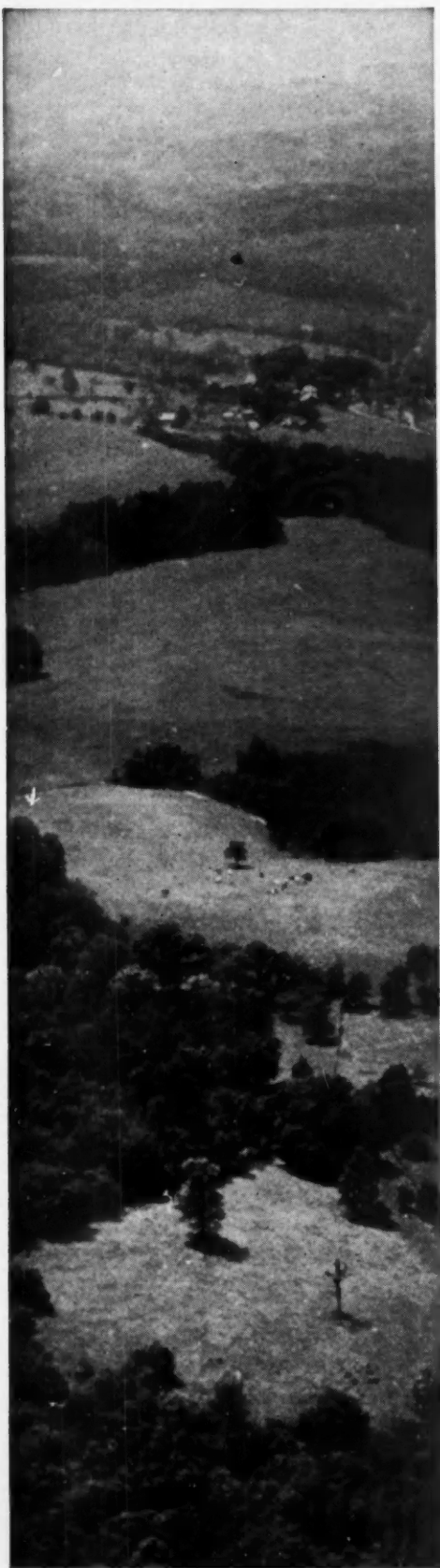
The Federal Highway Bill . . . and won

Even the one victory, though extremely important, was tainted by a setback in public goodwill and a temporary loss of badly needed new highways. Yet in spite of the "box score," truck interests have continued to prosper. There's just one basic reason—better service to the shipper.

Now comes the Cabinet Committee Report. In testimony late last month it was evident that even Cabinet members themselves had little concept of the full impact of their recommendations. There's a job to be done and thank God for strong organizations to carry the fight.

But there is danger that we may have worked the wolf cry a few times too often. Even staunch friends of the industry are weary of the "prophets of doom." How much better it would be if the industry could come up with a strong positive approach and carry it direct to the guy who counts most—Uncle John Q. Public.

Bart Rawson
Editor



Your trucks belong in this picture

RIGHT HERE is where your vehicles belong . . . on the road, not in the repair shop. To assure that, lubricate your engines with *Texaco D 303 Motor Oil HD*. You'll get more mileage between overhauls with less fuel consumption, lower maintenance costs.

Texaco D 303 Motor Oil HD, the fully detergent and dispersive oil especially refined for heavy duty service, keeps both gasoline and diesel engines clean, free from harmful deposits. Rings stay free and valves seat properly for full-power compression and complete combustion. And the tough lubricating film of *Texaco D 303 Motor Oil HD* guards against wear, assures longer life for all engine parts.

For chassis lubrication, use famous *Texaco Marfak* — get longer lasting protection against wear and rust. For wheel bearings, use *Texaco Marfak Heavy Duty* — assure longer bearing life. And for convenient multi-purpose use — in chassis, wheel bearings, water pumps and other parts — use new lithium-base *Texaco Marfak Heavy Duty Special*.

To get smooth, dependable operation and longer gear life in transmissions and differentials, use *Texaco Universal Gear Lubricant EP*.

To learn how these and other Texaco Lubricants can step up efficiency and cut costs for you, consult a Texaco Lubrication Engineer. Just call the nearest of the more than 2,000 Texaco Distributing Plants in the 48 States, or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.

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At Your Service

TIMELY NOTES ON MAINTENANCE AND OPERATION

by MURRAY SIMKINS Managing Editor

Heating Bearings for Assembly

HHEATING is recommended for larger size bearings including precision bearings. Use extreme care to make sure that bearings are never heated over 275 to 300 deg F. If the bearings are heated over this temperature they will begin to draw or soften. One of the best methods of heating bearings is with infrared lamps if available. The heat can be regulated by the number of lamps used and the distance of the lamps from the bearing. This method will assure you of minimum of handling and maximum cleanliness.

Electric ovens or electrically heated oil baths can be used but these should have thermostatic controls.

If oil is heated in a pan or metal container over an open flame you should use a screen on which the bearings will rest which is raised an inch or so from the bottom of the pan. The bearings should not rest on the bottom of the pan as the heat will be transferred directly from the flame through the pan to the bearing. This temperature will be very high and will draw the bearing.

When bearings are heated for assembly, the heated part should be checked after it is cooled to see that it is seated properly against the shoulder. There is a tendency to pull away from the shoulder as the cone cools and the cone should be clamped solidly against the shoulders.—IHC Fleetaid.

Having Brake Troubles?

HERE'S a guide to some of the causes of early failures of brake drums and linings, prepared by Raybestos Div. of Raybestos Manhattan. There are no new ones—but there are surely some deadly ones here.

Heat checked drums—caused by a. unbalance of braking effort, b. overloading, c. driver abuse, d. use of wrong type linings.

Glazed brake blocks—caused by oil or grease on the lining.

Scored blocks—caused by a. scored drums, b. dirt between block and shoe, c. overloading, d. unequalized shoes.

Crack at bolt holes—caused by a. wrong block for shoe, b. bolt holes too weak, c. weak bolts.

Unequal wear on blocks of same axle—caused by a. sticking anchors or cams, b. weak or broken return spring on one wheel, c. heat checked or scored drum, d. clogged lines, e. leaking air of vacuum chamber, f. defective wheel bearing.

Poor contact between block and drum—caused by a. improper anchor setting, b. worn anchor pin or bushing, c. worn cam bushing, d. under-size block, e. worn drum.

Improper wear on block—caused by a. bell-mouthed drum, b. bent spider, c. improper anchor setting, d. undersized block (with fixed anchor).

Coated Nylon Fabric for Truck Covers

NEOPRENE-COATED nylon fabrics offer several advantages in truck covers. The fabric weighs only 16 oz per sq yd. Of this, 5.5 oz per sq yd is high strength, rot resistant nylon. The remainder is a properly compounded, balanced coating of neoprene (approximately 5 oz per sq yd per side) to provide complete waterproofness.

The method of inserting grommets is the same as for canvas fabric. A reinforcing strip of the fabric is placed at the hem to provide adequate gripping thickness for the grommet and to provide greater grommet pull-out resistance.

Using neoprene-compatible adhesives, a cemented seam can be obtained that is as strong and durable as the fabric itself. The seam will be sufficiently strong for handling purposes after 20 to 45 minutes depending on the cement used, and maximum strength will be attained after about 24 hours.

For sewn seams a 1200 denier thread of
(TURN TO NEXT PAGE, PLEASE)



At Your Service

Continued from Page 9

weather resistant "Orlon" is recommended. To prevent leakage, a sealing cement must be applied over the seam. Needle holes thus are closed, and water cannot leak through the seam.

One important feature of neoprene-coated nylon fabric is its ease of patching. The trucker can make his own tarpaulin repairs thus reducing downtime, on-the-road cargo damage, and costly repair charges.

Service tests show that neoprene-coated nylon tarpaulins can save truckers as much as 50 per cent on their truck-cover expenses, according to DuPont.

In over-the-road service tests, neoprene-coated nylon tarpaulins have lasted four years under conditions where conventional materials last only two years. On the basis of orig-

inal cost alone this represents a saving of \$11.75 a year per tarpaulin, or \$47 over a four-year period. Two conventional tarpaulins, at a cost of \$100 each, are required to obtain four years' service, compared with one neoprene-coated nylon tarpaulin at a cost of \$153, DuPont reports.

Poor Power Diagnosis

IF THE ENGINE does not deliver its full rated power at the governed rpm, the following inspections will usually disclose the cause of the complaint:

1. With engine operating at maximum free engine speed, and vehicles in direct drive or overdrive, apply dynamometer load until the engine speed is brought down to the recommended shift point.

2. Check exhaust for smoke density.

a. Engine exhaust smoke is a visible indication of the combustion or burning of fuel in the combustion chamber.

b. Black or grey smoke will indicate incomplete burning of fuel in the cylinders. This condition can be caused by:

- (1) High exhaust back pressure.
- (2) Restricted air inlet.
- (3) Excessive fuel injection.
- (4) Irregular fuel distribution.

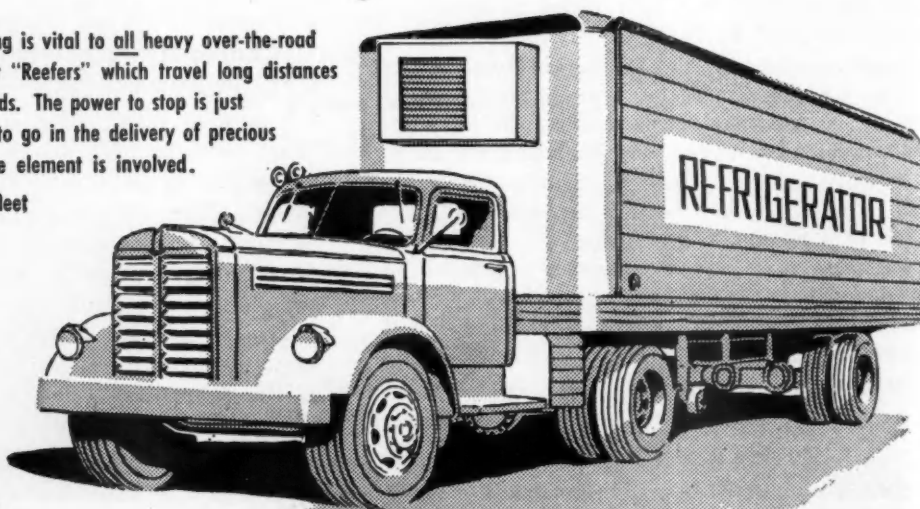
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SCANDINAVIA ZT BRAKE BLOCKS

a MUST for "REEFERS"
and over-the-road trucks

While dependable braking is vital to all heavy over-the-road equipment, it's a must for "Reefers" which travel long distances transporting perishable foods. The power to stop is just as essential as the power to go in the delivery of precious cargoes when a fixed time element is involved.

Whether you operate a fleet of "Reefers" or heavy over-the-road equipment, SCANDINAVIA ZT Brake Blocks give you a greater margin of safety, reduced brake drum heat checking and low cost per mile maintenance. On your next tough job, test-install



BRAKE
BLOCKS

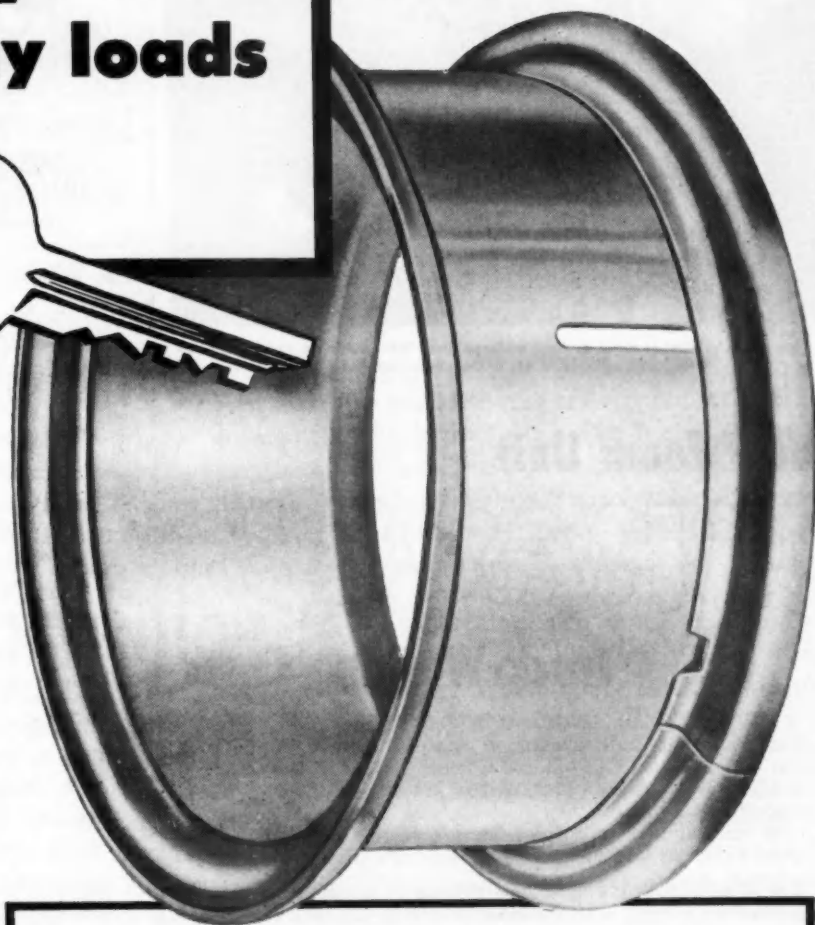
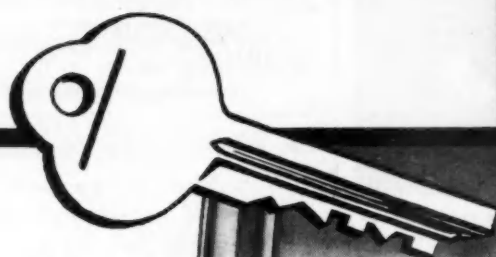
• SCANDINAVIA •

BRAKE
LININGS

DIVISION OF SCANDINAVIA BELTING COMPANY, 744 BROAD ST. (P.O. BOX 464) NEWARK 1, N. J.
WAREHOUSE: 250 CENTRAL AVE., NEWARK 1, N. J. • PLANT: CHARLOTTE 1, N. C.
BRANCHES IN CAMBRIDGE, MASS. AND CLEVELAND, OHIO

This could be the key to bigger pay loads

Exclusive Goodyear Bond-a-Coat finish
resists corrosion and discoloration,
keeps its luster indefinitely.



RIMS may be a relatively small item in your budget, yet choosing the right ones can mean big over-all savings.

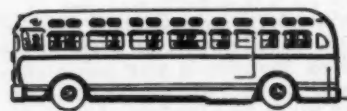
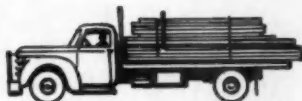
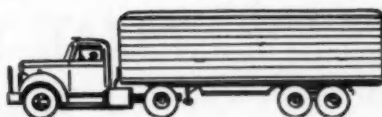
For example, Goodyear Wide Base Rims, in nearly all sizes, weigh less than standard-size wide base rims. When you specify these lighter rims, you can haul as much as a hundred pounds' extra pay load on a tractor-trailer unit.

The Mileage Adds Up, Too

What's more, Goodyear Wide Base Rims roll up extra tire mileage — up to 30% extra, according to service records of big fleet operators. The reason is that these superior rims help to reduce sidewall flexing—resulting in less tire heat, fewer tire failures and road delays.

Lower Cost

And here's the topper: even their initial cost is lower. Your Goodyear Rim Supplier can give you complete details. Or write Goodyear, Metal Products Division, Akron 16, Ohio.



GOOD YEAR

WIDE BASE RIMS

MORE TONS ARE CARRIED ON GOODYEAR RIMS THAN ON ANY OTHER KIND

COMMERCIAL CAR JOURNAL, October, 1955



Worker spraying foam on large Knox Glass Bottle Co. truck. Note how detergent adheres to truck. Oakite No. 511 Foam Unit in foreground.

New Foam Unit

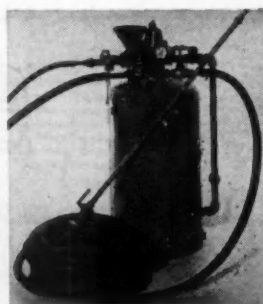
SHAVES

Truck-Washing Costs

For real speed and economy in washing their tractors and trailers, the Knox Glass Bottle Company uses the new Oakite No. 511 Foam Unit. The reasons are simple. They shave three hours a day off their fleet cleaning time . . . cut detergent consumption way down because there's no waste . . . their workmen like the ease and simplicity of the operation.

The Oakite No. 511 Unit operates on a principle of compressed air mixing with detergent solution. Using a 4 oz/gal solution of Oakite Composition No. 70, a heavy lather is generated and sprayed on the truck's surface. The lather covers the surface like a blanket . . . goes to work quickly and efficiently on the soils. A light brushing, if necessary, follows . . . then rinse. Trucks come out sparkling-clean. One man can wash even the biggest unit in a matter of minutes.

Why not contact your Oakite Representative today and arrange for a demonstration? He may be able to show you how to set up a really low-cost truck-washing operation in your yard. If you prefer, you can write direct to: Oakite Products, Inc., 26D Rector Street, New York 6, New York.



The Oakite No. 511 Foam Unit

SPECIALIZED INDUSTRIAL CLEANING
OAKITE
MATERIALS • METHODS • SERVICE

Technical Service Representatives in Principal Cities of U. S. and Canada



At Your Service

Continued from Page 10

(5) Engine operating at condition other than those considered as standard (above 1000 ft. altitude, or at temperatures above 90°F).

(6) Lugging engine.

(7) Improper grade of fuel.

(8) Improper injection pump timing.

c. Blue smoke generally indicates fuel or lube oil not burned in the cylinders and can be caused by:

(1) Fuel leaks.

(2) Internal lube oil leaks.

(3) Pull-over of oil from air cleaner.

(4) High lube oil consumption.

(5) Worn pistons and rings.

d. White smoke is generally associated with:

(1) Mis-firing cylinders.

(2) Low operating temperature.

(3) Low compression pressures.

(4) Improper grade fuel.

e. Intermittent puffs of smoke indicate missing or weak cylinders.

3. Heavy exhaust smoke density is often caused by a restricted air supply to the cylinders. This can also result from lugging the engine, dirty or restricted air cleaners, etc. To check the air flow through the air cleaners, measure the air inlet depression at the air inlet housing. The readings should be compared to the specifications of the engine being tested and the resulting service performed as recommended in the engine maintenance manual.

The common practice of switching to a known reference fuel will generally indicate if excessive exhaust smoke is caused by the mechanical condition of the engine or the malfunction of any of its systems, or if the smoke condition is caused by the use of an improper grade of fuel. This reference fuel check can easily be made by running the engine, under full load, with a grade of fuel that meets the manufacturer's fuel specifications. Should the exhaust smoke condition clear as the engine continues to run on the reference fuel, it can be determined that improper fuel is causing the smoke condition. Should the smoke condition continue as the engine is operated under full load on the reference fuel, the cause can be determined as being in the engine or its adjustments and not in the fuel.—From Clayton's Dynamometer Manual.



OCTOBER,



UP FRONT

WITH CCJ

OCTOBER, 1955, FLEET HIGHLIGHTS AS REPORTED BY COMMERCIAL CAR JOURNAL

MR. EXECUTIVE, This summer's "Partners In Safety" campaign saw over 83,000 truck drivers roll-up almost a billion miles of accident-free driving during the 101 days of the safety effort. A total of 1109 fleets participated in the program that was kicked-off at this year's Spring Meeting of American Trucking Assns.' Council of Safety Supervisors. Among the states, New Jersey had the most fleets registered—68 fleets with 5137 drivers, and Illinois led in driver enrollment—9351 drivers in 51 fleets.

ATA CONVENTION will put heavy emphasis on the Cabinet Committee Report on Transport Policy (Sept., pages 20 and 74). Scheduled for later this month in Washington, D. C., the convention will be faced with the challenge of creating a program to successfully oppose the railroad-slanted legislation due for Congressional debate in January and, at the same time, win public support for the trucking industry's view (see page 5, this issue). Preliminary hearings before a Congressional subcommittee late last month alerted the committee members to the possibilities of discriminatory rate setting and harm to small business contained in the proposed legislation. (For comment from the hearings, see page 98, this issue.)

HIGHWAY TAXES are certain to be debated in Congress in January. Representative Fallon, whose "soak-the-heavy-trucks" highway bill fell flat on its face in the closing hours of this year's Congress, has asked the Bureau of Public Roads to supply his House subcommittee on roads with the data necessary to arrive at suggested conclusions and recommendations with respect to equitable distribution of the tax load between various classes of vehicles. Fallon wants the report by Jan. 1 at the latest, has secured the BPR's cooperation in keeping the material under wraps until it is presented to the subcommittee.

BPR'S REPORT to Fallon won't affect its long range study of the economic size and weight problem—an attempt to answer the three-pronged question of "How big a truck should pay how much for what kind of highway?" Commercial Car Journal queried the BPR last month to see if material from this study would be incorporated in the report to Fallon, discovered that the top BPR official working on the long range study was taking off on a 15-month long series of field trips to gather information and did not expect to be in a position to work-up any conclusions until after 1956. The Bureau makes no prediction when this study will be done and warns that it plans no interim reports, raising the question of how valid a base for taxation the report to Fallon will be.

DETROIT DISPATCH

STEEL WIRE IN tires sprang up in two places last month. U. S. Rubber demonstrated one in California that has a steel wire mesh shield between the carcass and tread to prevent ruptures and cuts (Page 116, this issue). It's available in truck sizes from 6.00 to 11.00. Another company is getting ready to promote a tire using stranded wire from U. S. Steel for reinforcing cord. It expects the tire to have a 300,000-mile life.

"MAN" DIESEL ENGINE FROM Germany is attracting attention. Basic claims are quietness, clean exhaust, ability to handle almost any kind of fuel. Placement of injector nozzles and cylinder head configuration put most of fuel on cylinder walls. Also air is warmed just prior to ignition. Cautious opinion by most engineers is that it

looks good, but they want more thorough evaluation and testing under fleet operations.

NEW TRUCK LINES FOR '56 described this month are International (page 90) and Ford (page 94). FWD has a new 6x4 road tractor (page 82). New truck prices are heading up as was expected following higher wage costs in truck manufacturing and supplier industries. International's increases range from \$65 on light models to \$240 on a heavy duty 6-wheeler.

SEALED-BEAM HEADLAMP WITH built-in aiming has been announced by Guide Lamp Division of GM. Key feature is three glass knobs, "guide points," cast into the lamp's lens. A plane laid across these three points forms a surface at right angles to the

axis of the light from which beam is using a new a

SEAT BELTS V tional equipme other truck mo show no great e They say driver tecton becaus and chassis use drivers don't g and would obje a belt or harne

MORE SAFETY passenger cars ican Automobi meeting last m adopted resolu facturers to t higher horsep

WASHINGTON RUNAROUND

VOLUME OF intercity general freight hauled by truck in July was up 8.7 per cent compared to July, 1954. Excluding the effects of the New England driver strike in July, the increase comes to 11.5 per cent, says American Trucking Assns.' Research Dept.

TRANSPORTATION TAX ON property does not apply on automobile or truck delivery by the driveaway method providing the only facilities furnished are the driver, nor does it apply on back-haul charges of an astray freight forwarder shipment, says Internal Revenue Service.

EXCISE TAX HEARINGS GOT under way early this month before a Congressional sub-committee to discuss administrative and technical corrections in the law. The hearings are not concerned with reductions in the tax rates but could result in legislation to make compliance with the tax easier.

PIGGY-BACK FOR motor common carriers is expanding. Rail-Trailer estimates August volume between Philadelphia-New York and Chicago over Pennsylvania Railroad at over 1500

motor common carrier trailer loads. Motor carriers say late arrivals and no real cost advantage are present barriers to more rapid growth. (For further analysis, see page 68, this issue.) Pennsy began last month motor carrier piggy-back service between Pittsburgh and Chicago and between New York and St. Louis, expects to start next month service between Philadelphia-New York and Bristol-Roanoke (Va.) in connection with the Norfolk and Western railroad.

FIVE TRAILERSHIPS HAVE been OK'd for mortgage insurance by the Maritime Administration (Aug., page 18). Transportation Utilities (New York) will build two for New York-Miami operation, later plans to use the St. Lawrence Seaway (now under construction) to serve the Great Lakes ports. Alaska Trailships' two new ships will haul both trailers and railroad cars between Seattle and Alaska ports. T.M.T. Trailer Ferry (Miami) will convert a former Navy dock landing ship, use it in service between Port Everglades, Fla., and Puerto Rico. Still pending is a mortgage application from American-Hawaiian Steamship Co. to build 10

trailerships to sailings betwe Angeles-San F Seattle. The sh 570 trailers as proposed by trailers.

ICC's MANAG F. Hamm, Jr. month after a reorganizing th of the Comm Hugh W. Cro effecting some

ATA FOUNDA series of annuc to professional standing jour the improve use. Named f Rodgers, awa articles appea categories — farm magazine weekly newsp group will get place, \$300 fo made possible mobile, Inc.

BUSINESS TRENDS

Second Quarter Truck Tonnage*

Region	Second Quarter 1955	Second Quarter 1954	Per Cent Change
New England.....	2,916	2,853	+ 2.2
Middle Atlantic.....	12,957	11,363	+14.0
Central.....	20,768	17,175	+20.9
Southern.....	7,433	8,066	+22.5
Northwestern.....	2,785	2,596	+ 6.5
Middlewestern.....	2,940	2,623	+12.1
Southwestern.....	5,549	4,564	+21.6
Rocky Mountain.....	1,979	2,082	- 5.0
Pacific.....	5,692	5,918	- 3.6
United States.....	62,998	55,240	+14.0

* In thousands of tons. Reported by ATA Research Dept.

With the tonnage index at 172, ATA's Research Dept. reports a record second quarter for 1955. Previous second quarter high was 162 in 1953. For 1954, it stood at 151. Chart above shows tonnage increases in the various regions.

axis of the light beam, provides a base from which beam aiming is speeded using a new alignment guide.

SEAT BELTS WILL be offered as optional equipment by Ford, Dodge and other truck makers. Early indications show no great enthusiasm by fleet men. They say drivers have much more protection because of more rugged cab and chassis used in trucks. Further the drivers don't go at such high speeds and would object to the confinement of a belt or harness.

MORE SAFETY AND less speed in new passenger cars was asked for by American Automobile Assn. at its annual meeting last month. In an unanimously adopted resolution, AAA asked manufacturers to tone down emphasis on higher horsepower and more speed.

IN THIS ISSUE . . .

Bus men clean up with a shop-made **ROTARY BUS WASHER** from South Penn (page 71), and a tile-lined "**BATHROOM**" for washing of parts and major assemblies from Virginia Transit (page 72).

Fleet operators may find some big cost cutters in considering how Riley Cartage saves \$300 per year per truck with **LP GAS** (page 74), or how Carolina Motor Freight reduces troubles with **AIR STARTERS** on diesel tractors (page 80).

Costs also can be trimmed by extending **ENGINE LIFE** with adequate **COOLING SYSTEM** service (page 76) or by boosting **TRAILER UTILIZATION** by taking the shop to the trailer (page 83).

For your consideration, here are a raft of **NEW MODELS**, including FWD's new 6x4 road tractor (page 82), International's S-Line (page 90), Trailmobile's "Optimum" cube freight van (page 92), Ford's line for '56 (page 94), Royco's new tandem suspension (page 96), Hendrickson's tandem with light weight aluminum equalizer beam (page 96), Mack's new dump truck chassis (page 96), and U.S. Rubber's steel-shielded tire (page 116).

trailerships to provide twice-a-week sailings between New York and Los Angeles-San Francisco-Astoria (Ore.)-Seattle. The ships are designed to carry 570 trailers as compared with those proposed by McLean to carry 285 trailers.

ICC's MANAGING DIRECTOR, Edward F. Hamm, Jr., resigned end of last month after a two-year tour of duty in reorganizing the administrative set-up of the Commission. ICC Chairman Hugh W. Cross commended him for effecting some 30 streamlining changes.

ATA FOUNDATION HAS announced a series of annual awards totalling \$9000 to professional writers to recognize outstanding journalistic contributions to the improvement of highways and their use. Named for ATA Founder Ted V. Rodgers, awards will be made for articles appearing in each of three categories — general circulation and farm magazines, daily newspapers and weekly newspapers. Winners in each group will get \$1500, \$700 for second place, \$300 for third. The awards are made possible by a grant from Trailmobile, Inc.

The Road Ahead



TIRE PRICES ARE expected to go up again before the year's end. Natural rubber price, now more than double a year ago, and recent rubber factory wage boosts are factors behind the prediction.

NEW AUTOMATIC TRANSMISSION FOR trucks in the 1 to 2½-ton range is coming within the next three to four months. Soon to be adopted by a large volume maker, it has a torque converter plus a gear box to give six forward speeds.

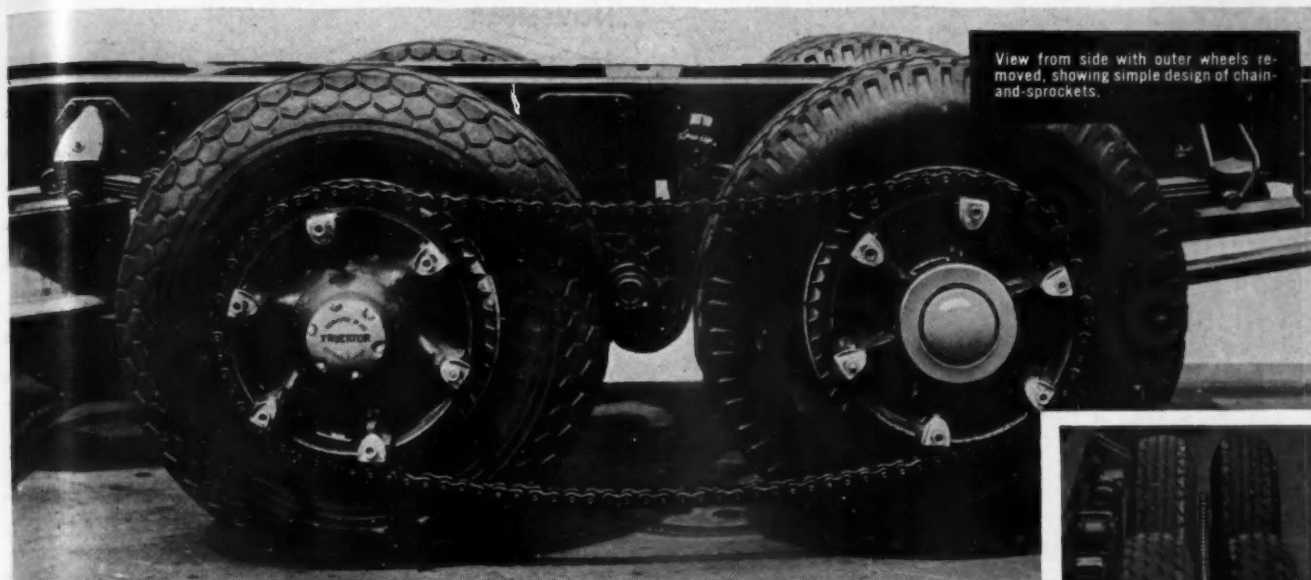
NATIONAL SAFETY CONGRESS sessions for fleetmen begin Tuesday morning, Oct. 18, in the LaSalle Hotel, Chicago. First session's theme is "Preventability—Key to Safe Driving Awards," features a panel debate on accident review boards. In the afternoon, fleet safety men will stress the economic advantages of improving accident reporting. Wednesday morning's meeting will be concerned with determining accident costs and putting the information to work. In the afternoon, methods of organizing effective safety programs will be analyzed with a special presentation on measuring the value of the accident prevention program.

BREAKDOWN OF OHIO RECIPROCITY HAS been averted for the present. Late last month, a Common Pleas Court judge in a temporary restraining order told the state's reciprocity board to halt its move to cancel reciprocity with Michigan, Illinois, West Virginia and Indiana. The court further ordered that reciprocity agreements with 10 other states, already cancelled, be reinstated. The action came as a result of a suit by 12 fleets who claimed the reciprocity board did not have the power to cancel reciprocity agreements. The trouble started in July when the Ohio Supreme Court ruled that Michigan trucks were exempt from Ohio's axle-mile tax under the Michigan-Ohio reciprocity pact. Ohio's reciprocity board then notified some 20 states that Ohio's pacts with those states would have to be amended to exclude the axle-mile tax or be cancelled. Michigan, Iowa and Illinois retaliated by notifying Ohio that, if their pacts were cancelled, passenger cars and trucks from Ohio would be required to purchase license plates in those states in order to operate therein. States whose pacts were cancelled prior to the temporary restraining include Alabama, Florida, Iowa, Kentucky, Louisiana, Mississippi, Missouri, Nebraska, North Carolina and Pennsylvania, according to the suit initiated by the 12 truck fleets.

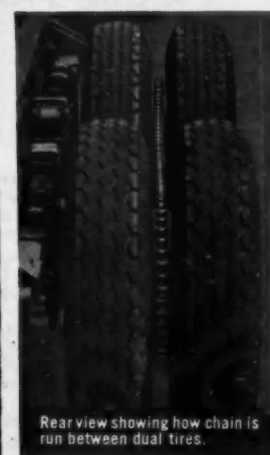
"MAKE EVERY DAY SD DAY" HAS been adopted as the theme of this year's Safe Driving Day scheduled for December 1. Traffic accident score keeping this year will begin Nov. 21, to be designated "SD Day — 10," and will continue until Dec. 11, "SD Day + 10."

TRUCK PRODUCTION IS expected to reach 1.2 million this year, according to recent estimates based on data for the first seven months summarized below:

In thousands of units, except bus sales are in actual numbers	New Truck Registrations		Truck Factory Sales—Domestic		Truck Trailer Shipments		Bus Factory Sales—Domestic		Truck and Bus Tires				
									Replacement Shipments		Original Equip. Shipments		Inventory End of July
	July	7 Months	July	7 Months	July	7 Months	July	7 Months	July	7 Months	July	7 Months	
1955	84.4	518.5	93.7	529.2	5.9	41.2	256	1660	908.7	5161.6	429.0	2298.6	2484.5
1954	65.2	496.7	82.2	530.7	4.2	32.0	190	2214	723.9	4414.2	285.0	2244.6	2577.0



View from side with outer wheels removed, showing simple design of chain-and-sprockets.



Rear view showing how chain is run between dual tires.

Trucktor[®]

Detachable 4-WHEEL DRIVE

...FOR BETTER TRACTION ON SLIPPERY ROADS



You get more than increased payload capacity when you convert with Trucktor 3rd Axles. You also get that improved traction that is so critically needed during about 10% of highway running time — from Trucktor's exclusive *Detachable Chain-and-Sprocket 4-Wheel Drive*.

It is a simple matter for the driver to slip the chains over the sprockets and pin them in place in a few minutes time. When the extra traction is no longer needed, they are just as readily re-

moved—can be stored in tool box when not in use. Wheels do **NOT** have to be removed to attach or detach chains.

The sturdy, lightweight construction of Trucktor's Detachable Chain-and-Sprocket 4-Wheel Drive saves payload. The better traction makes tire chains unnecessary. Detachability saves wear.

Keep your payloads on the go **ALL** the time this dependable, economical way. Prepare now for winter road conditions.

See your Truck Dealer, Trucktor Distributor, or write direct to the Trucktor factory.

THE TRUCKTOR CORPORATION, Route 22, Mountainside, N. J.

Safety IS NO ACCIDENT—6-Wheelers ARE SAFER!

DATES and DOINGS

(For calendar of Fleet Training Courses see page 124)

OCTOBER

- 17-18—Irregular Route Common Carrier Conference, American Trucking Assns., Annual Meeting, Mayflower Hotel, Washington, D. C.
- 17-21—American Trucking Assns., Annual Convention, Statler and Mayflower Hotels, Washington, D. C.
- 17-21—Executive Committee, American Trucking Assns., Washington, D. C.
- 17-21—National Safety Council, National Safety Congress and Exposition, Chicago, Ill.
- 24-26—Automotive Electric Assn., Regional Conference, Los Angeles, Cal.
- 24-27—National Assn. of Railroad and Public Utilities Commissioners, Annual Convention, Grove Park Inn, Asheville, N. C.
- 26-28—American Society of Body Engineers, Annual Technical Convention and Exhibit, Rackham Memorial Bldg., Detroit, Mich.
- 31-Nov. 2—Automotive Electric Assn., Regional Conference, Portland, Ore.
- 31-Nov. 2—Society of Automotive Engineers, Golden Anniversary Transportation Meeting, The Chase Hotel, St. Louis, Mo.

NOVEMBER

- 2-3—New England Bus Assn., Northeast Bus Traffic Assn. and Inter-city Bus Assn. of New York State, Three-way Joint Meeting, Hotel Kenmore, Boston, Mass.
- 2-4—Society of Automotive Engineers, Golden Anniversary Diesel Engine Meeting, The Chase Hotel, St. Louis, Mo.
- 4-5—West Virginia Motor Truck Assn., Annual Meeting, Daniel Boone Hotel, Charleston, W. Va.
- 7-8—Texas Motor Bus Assn., Annual Convention, Driskill Hotel, Austin, Texas.
- 9-10—Society of Automotive Engineers, Golden Anniversary Fuels and Lubricants Meeting, Bellevue-Stratford Hotel, Philadelphia, Pa.
- 10-11—Arkansas Bus and Truck Assn., Annual Meeting, Hotel Marion, Little Rock, Ark.
- 15-17—National Freight Claims Council, American Trucking Assns., Annual Meeting, Jung Hotel, New Orleans, La.
- 17—Maine Truck Owners Assn., Fall Get-Together, Lafayette Hotel, Portland, Me.
- 17-19—Montana Motor Transport Assn., Annual Meeting, Florence Hotel, Missoula, Mont.

DECEMBER

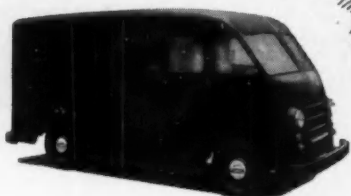
- 1-3—Oregon Trucking Assn., Annual Meeting, Multnomah Hotel, Portland, Ore.
- 4-5—Missouri Bus and Truck Assn., Annual Meeting, Governor Hotel, Jefferson City, Mo.
- 4-9—American Assn. of State Highway Officials, Annual Meeting, Jung Hotel, New Orleans, La.
- 7-8—Automotive Service Industries, Executive Booth Conference, Navy Pier, Chicago, Ill.

JANUARY

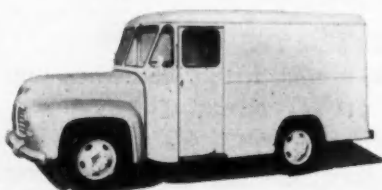
- 9-13—Society of Automotive Engineers, Annual Meeting, Sheraton-Cadillac and Statler Hotels, Detroit, Mich.
- 11-14—American Roadbuilders Assn., Municipal Auditorium, Miami Beach, Fla.
- 18-19—Executive Committee, American Trucking Assns., Washington, D. C.
- 23-25—Truck-Trailer Manufacturers Assn., Annual Convention, Edgewater Gulf Hotel, Edgewater Park, Miss.
- 23-27—Regular Common Carrier Conference, Board of Governors Meeting, El Mirador Hotel, Palm Springs, Cal.

Stronger. More Durable, More Modern, Lighter

TRUCK BODIES of MONTPELIER (FRP) FIBERGLAS Reinforced PLASTIC



Montpelier Urban Delivery Body



Montpelier Side-Aisle Delivery Body

Montpelier
FIBERGLAS REINFORCED PLASTIC
BODIES

NO OTHER BODY STRUCTURE HAS ALL THESE CHARACTERISTICS

CORROSION — ODOR PROOF

MONTPELIER (FRP) Plastic bodies do not corrode—do not pick up odors—rust—rot—and may be steam cleaned without deterioration.

SUPERIOR INSULATING VALUE

MONTPELIER (FRP) Plastic body material has superior electrical and thermo insulating characteristics. FRP conducts only 1.2 B.T.U. as compared to 1200-1500 B.T.U. for aluminum, and 275-325 B.T.U. for steel.

REDUCED BODY WEIGHT

Considerable reduction in body weight—saves tires—saves gas—saves maintenance—improves load capacity.

IMPROVED BODY SANITATION

A high degree of sanitation is possible due to the extreme resistance of MONTPELIER (FRP) Plastic body material to acid—chemicals—odors—corrosion.

MAXIMUM STRENGTH

MONTPELIER (FRP) Plastic body construction results in body strength as great as any other body material used under similar conditions.

REPAIR AND MAINTENANCE

MONTPELIER (FRP) Plastic body material lends itself to easy repair of body damage. Such repairs may be easily and quickly made without a great deal of skill. Repainting is a comparatively simple procedure.

WRITE — WIRE — PHONE FOR COMPLETE INFORMATION

THE MONTPELIER MANUFACTURING CO. • MONTPELIER, OHIO

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Austin,
els and
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When fast starts mean lives or dollars -



Globe



batteries

provide starting punch...

INSTANTLY!

The battery performance so vital in emergencies . . . so important to profits for heavy machinery users . . . always pays off for truck and fleet operators! In the garage or on the road, Globe batteries help get trucks started quicker. And they deliver this outstanding performance . . . good weather or bad!

Every Globe battery is the result of continuous product research and development . . . plus the finest, most scientific methods of manufacture. Each battery produced has the advantage of Globe's 47 years of battery-engineering experience . . . 33 years of building batteries specifically for autos, trucks, heavy machinery and army tanks.

As the records prove, Globe batteries are unsurpassed by any battery made — for reliability, for durability. They stand up longer, through continued hard use and rugged working conditions. And the performance records also prove they're packed with reserve power to keep engines "spinning" until they start.

To get the finest batteries money can buy, always specify or install Globe batteries. You're sure of the best performance . . . sure of batteries that are built better to serve better!

GLOBE-UNION INC.

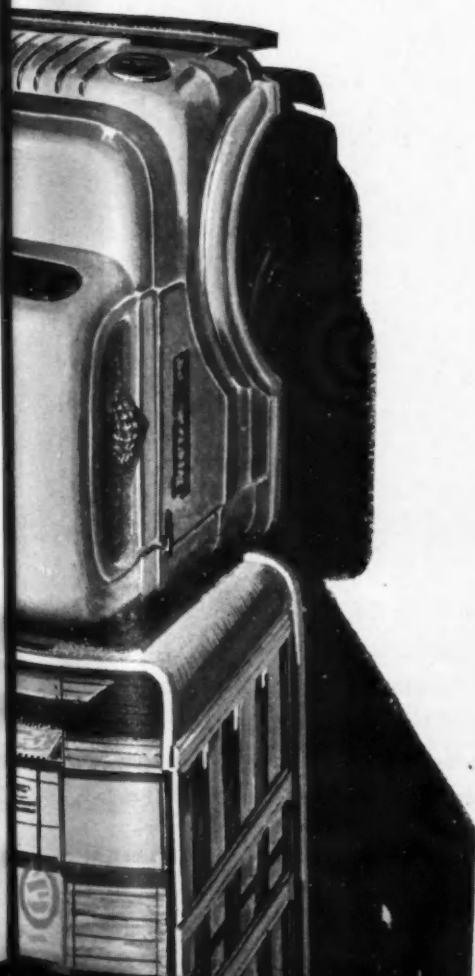
MILWAUKEE 1, WISCONSIN

FOR FAST SERVICE THERE ARE 16 GLOBE BATTERY PLANTS —
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DALLAS, TEXAS • EMPORIA, KANSAS • HASTINGS-ON-HUDSON,
N. Y. • HOUSTON, TEXAS • LOS ANGELES, CALIF. • MEMPHIS,
TENN. • MILWAUKEE, WIS. • MINERAL RIDGE, OHIO •
OREGON CITY, ORE. • PHILADELPHIA, PA. • REIDSVILLE, N. C.
SAN JOSE, CALIF. • AJAX (TORONTO) CANADA.

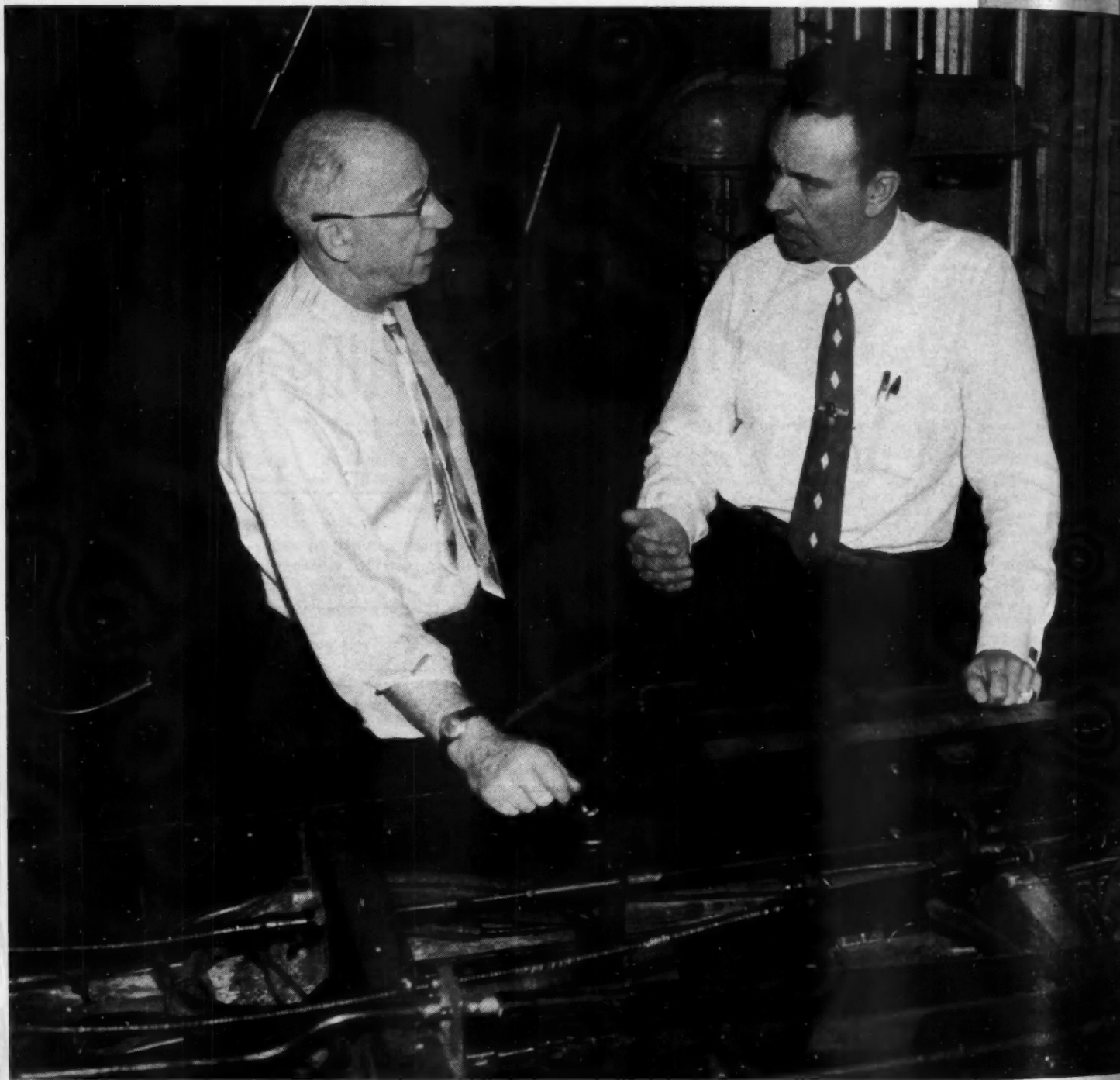
if it's petroleum-powered *there's a*

GLOBE-BUILT BATTERY

... right from the start



Gallagher Freight Lines finds STANOLUBE



Howard Kissell (left), Superintendent of Equipment for Gallagher, discusses lubrication of Cummins NH 200 engine with Standard Oil automotive lubrication specialist, Ralph H. Dunn. Over-the-road haulers find Ralph a good man to talk with about lubrication. He has worked for Standard since 1945. Ralph has an engineering background, is a graduate of Colorado State College. He has completed the Standard Oil Automotive Sales Engineering School. Customers find this experience and training pay off for them.

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World's Largest
Trucks

Plants at: Detroit, Mich
New York • Ashta
New

COMES TO TRUCKING

with TDA 2-speed axles

Exclusive, double-reduction design offers almost unlimited possibilities of gear ratios and ratio spreads—this versatility provides tailored power for every trucking need.

How TDA's extra "spread" works to your benefit. All 2-speed axles employ an extra set of gears to give two ranges of speed or power to choose from . . . one for *pulling power*, the other for fast speed. Most 2-speed axles offer only one choice of "spread"—37%. Design limitations prevent changing this standard "spread".

However, TDA uses the exclusive double-reduction design. With TDA, spreads are available all the way from 28% to 49%. This means that your axle can actually be tailored to give you just the power you need. Not only can you specify the spread most suited to your immediate trucking need—but you can easily *change* from one spread to another by merely changing the low speed helical pinion and gear—an easy mechanical change.

TDA's more efficient use of engine power gives important benefits . . . high road speeds, faster deliveries, better payload, and maximum fuel economy. No matter what your hauling problem or load/road conditions you save with TDA.

How TDA's 2-Speed principle works! A husky hypoid ring gear and pinion set (No. 1 above) provide the *first step* of the total gear reduction for both fast and slow ratios. Two large, heavy-duty helical gear sets provide the *second*



step. Both sets are of balanced size and capacity. One set (No. 2) is for fast speed; the other (No. 3) is for slow speed. The clutch collar (No. 4) power shifts to right or left to engage one helical pinion or the other.

Greater endurance, longer truck life with TDA. TDA's simple design eliminates small complicated parts and midget size gears. Large hypoid-helical design provides more teeth in contact—quieter operation and far less strain. Bearings are larger, too. All this adds up to more profitable operation under all conditions.

TIMKEN *Detroit* AXLES

TIMKEN DETROIT AXLE DIVISION
ROCKWELL SPRING AND AXLE COMPANY
DETROIT 32, MICHIGAN



World's Largest Manufacturers of Axles for
Trucks, Buses and Trailers

Plants at: Detroit, Michigan • Oshkosh, Wisconsin • Utica,
New York • Ashtabula, Kenton and Newark, Ohio
New Castle, Pennsylvania

©1955 RS&A Company

Increase axle life with GENUINE TDA EQUIPMENT PARTS

Take no chances with ordinary replacement parts. For sure, dependable, factory-type jobs, specify genuine Timken-Detroit Axle parts kits—identical to your axles' original equipment.

Each kit is complete—gives you everything you need in one handy package. Gaskets and shims, brake liners and rivets, steering knuckles, king pins and bushings, differential nests—for every

size of brake and axle. Order by number from your dealer. Cut labor and adjustment costs. Get trucks back on the road quicker.



CCJ BULLETIN BOARD



THE OVERDRIVER

There's a lot of talk around the pool rooms about overdrives—but little is said about the "overdriver." The overdriver is part of the trend toward automatics. He's the "maniamatic" type who overdrives his reaction time, his handling skill, his brakes, his headlights. He's the guy you meet coming out of the emergency ward—feet first—because he couldn't stop the damned thing in the space he had left.

Overdriving is a common fault of the common male. This species of driver takes too much for granted. He assumes that he won't have to hit the brakes without adequate notice. He feels that he is still as quick on the draw as TV's best cowboy. He takes a chance that no one is coming out there ahead of his high beams. And it takes an accident to prove that this sort of guessing is dangerous.

Most drivers know that normal reaction time is about .75 sec. At 50 mph this means that one will travel 55 feet before one can hit the brake pedal. Then even with efficient brakes it will take another 131 feet to stop. So the Safety margin is easy, to figure. Just leave + feet between you and the unknown road ahead.

In night driving, in heavy traffic, in poor weather conditions the good driver compensates for lack of see by slower speeds or by more attention at the wheel. When he is tired, sleepy or when the road surface is slippery, he matches speed to conditions. That way he keeps out of the emergency entrance. He saves more cows and fenders and fence posts that a'way . . .

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COMMERCIAL C

White

for Our New Syracuse-East "Sliding Seat" Operation

INTERSTATE has proved White Quality. On short, fast runs in the Midwest. On "Hot Shot" trips where schedules are tight. On long-run relays from St. Paul to Boston.

The White 3000 has helped with Interstate length problems...has a very favorable axle weight factor, with an average increase of payload up to 2,500 lbs.

"Now, we're starting our new and rugged "Sliding Seat" operation from Syracuse to the New England States with the White 3000," Mr. Rahilly says.

"Our new Whites will average more than 2,000 miles a week—speeding schedules and improving service," he reports.

"We know we can do both with our Whites!" Mr. Rahilly says.

... L. D. Rahilly, President,
Interstate Motor Freight
System, Grand Rapids,
Michigan,



Brings better living to 3,500 communities on 18,382 certificated route miles in 19 states and the District of Columbia.

Operates 50 million miles a year.

... more than 2,000 pieces of highway equipment.

... 2,200 employees. 51 terminals.

Business up 17% first six months of 1955. 1954 operating revenue—\$25 million.

YOUR WHITE Representative
has Extra Profit News for You about
the Industry's Greatest Line
of Highway Tractors.
See him ... Soon!



FIRST—IN THE FIELD



For More Than
50 Years The Greatest Name
In Trucks

PROVED IN BILLIONS
OF LOW-COST MILES

THE WHITE MOTOR COMPANY
Cleveland 1, Ohio



Laugh it off!

First Freight Loader: "Do you subscribe to the thoughts expressed in that famous little poem: 'A wee bit of moonlight now and then, marries off the best of men?'"

Second Freight Loader: "Oh, most certainly! If it hadn't been for the moonlight her father would never have caught us."

ccj

Safety Sadie: "Ooh! How did Lucille get that beautiful tan?"

Catty Cora: "She slapped some fresh truck driver who was chewing tobacco."

ccj

The waitress brought him a plate of steaming dumplings and two chicken legs. Since he couldn't abide dark meat, he tried to make the waitress understand that he wanted to swap the chicken legs for white meat, but he had laryngitis and couldn't speak. When every other sign failed, he tried to show what he wanted by putting both hands on his chest. The waitress smiled, nodded her head and went out to the kitchen. In an instant she was back—with two glasses of milk.

ccj

WEAVIN' WILLIE, OUR CITY DRIVER, SAYS: "IT'S KINDA SILLY TO TAKE YOUR BOSS HOME TO DINNER WHEN SHE'S ALREADY THERE."

ccj

Maintenance Superintendent: "What a life! My wife is planning to elope with my best friend."

Shop Foreman: "Cheer up, boss. There are lots of other women in the world."

Maintenance Superintendent: "That's the trouble. I'm afraid he'll find that out, and change his mind."

The President of Fleety-Fleet Motor Express called in one of the line's junior clerks and said, "I've been getting some very fine reports about the way you've been discharging your duties, and I'd like to reward your good work."

The young man beamed at this compliment.

"How much are we paying you?" asked the big boss.

"Twenty-five dollars a week," replied the junior clerk.

"From now on," decreed the president, "you'll get a salary of \$50,000 a year and an unlimited expense account. What do you say to that?"

"Gee," excitedly exclaimed the young clerk, "that's wonderful. Thanks a lot, Dad."

ccj

Auto Parts Clerk: "How do you like your new boy friend?"

Maintenance Steno: "He's a lying no-good cad! He not only lied about the size of his yacht, but he made me do the rowing."

Cici Jay



"You look in that lower file, and I'll check this one!"

City Delivery Driver: "Didja know that I've got a lot of electricity in my hair?"

Cuddly Cutie: "I thought there was some good reason why you always want to park and spark. And it also accounts for you having such shocking things on your mind."

ccj

Yard Hostler: "When I depart this world, I want to die with my boots on."

Cuddlesome Cutie: "Well, hurry up and put them on. Here comes my husband."

ccj

Traveling Freight Auditor: "There, now, I told you if you married me I would bring you to Niagara Falls and show you the world's biggest cataract."

Former Chorus Cutie: "Cataract? You lying weasel you, I thought you said 'Cadillac.'"

ccj

SLIM 'N GREASY, OUR SHOP ROUST-ABOUT, SAYS: "WHEN A MAN OFFERS TO GET A GAL AS HIGH AS A KITE THERE ARE PROBABLY STRINGS ATTACHED TO IT."

ccj

Fleet Operator's Wife: "Hello, hello, is this the Missing Persons Bureau? My husband has disappeared. Can you help me find him?"

Bureau Chief: "Certainly, Madam, will you describe him?"

Fleet Operator's Wife: "Of course, thank you. He's short and very fat. And bald. Likes blondes and alcohol. Wears thick glasses and has a high-pitched, squeaky voice with a red nose. And —uh —oh, the devil with him. Never mind!" (And she hung up.)

Resume Work

COMMERCIAL CAR JOURNAL, October, 1955

"Tachographs

... help us safeguard cargo
and cut maintenance cost"

says: A. A. FOWLER, JR., Vice President
Indianapolis Kansas City Motor Express Co.,
Kansas City, Mo.



Wagner Electric Corporation
6400 Plymouth Avenue
Saint Louis 14, Missouri

Gentlemen:

"Ship I.K.C.—Straight and to the Point" is the byword that reflects the trucking service we provide customers from Virginia to Kansas. It is a service in which every phase of our hauling operation is given exacting care—from proper preventive maintenance for all equipment to the carrying out of maximum safety standards.

Tachographs have helped play an important role in our operation policy. In the six years they have been in our service they have furnished us an analysis of over-all performance and aided in determining schedules. Tachographs help us safeguard cargo and cut maintenance cost. Also they have been helpful in protecting our drivers against unjust prosecution since the charts have been accepted as legal evidence in court in establishing the true rate of speed.

We are most pleased with the service Tachographs are providing us.

Very truly yours,

A. A. Fowler, Jr.
A. A. Fowler, Jr.
Vice President

Take the word of fleet operators like Mr. A. A. Fowler of I.K.C. (and the hundreds like him) who find it good business to install and use TACHOGRAPHS.

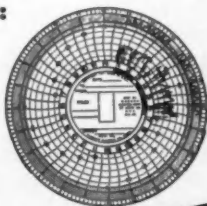
Trip after trip, these men depend on TACHOGRAPHS to measure the performance of both trucks and drivers in order to make their trucking operations safer, more efficient, more economical.

The Tachograph is a recording speedometer. From a wax chart that is inserted into the TACHOGRAPH at the start of a run, you get a complete and permanent record of an entire trip. It's your best bet for helping you to protect your drivers, recognize good driver habits, reduce accidents and maintenance costs and keep your customers' cargoes on schedule.

For full details, send the coupon provided below for your free copy of Wagner Bulletin SU-3.

TACHOGRAPHS TELL YOU:

- When engine started
- How long it idled
- When vehicle was in motion
- How fast it traveled
- When it stopped—and for how long



Wagner Electric Corporation

6476 PLYMOUTH AVE., ST. LOUIS 14, MO.

Please send a copy of Bulletin SU-3.

Name and Position _____

Company _____

Address _____

City _____ State _____

We operate _____ Vehicles
(NUMBER)

525-4

LOCKHEED HYDRAULIC BRAKE PARTS and FLUID • NoRoL • CoMaX BRAKE LINING • AIR BRAKES • TACHOGRAPHS • ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL CRANE BRIDGE BRAKES

COMMERCIAL CAR JOURNAL, October, 1955

Freight by Truck— It's Big Business

**Offering speed, flexibility, reliability, economy and convenience,
for-hire trucking sells \$5 billion worth of transportation annually**

▼ COMPARED with many other industries, for-hire trucking is a youngster, barely out of short pants. But it's a vigorous youngster, growing steadily, earning and spending big money, and playing an important role in the nation's economy.

Meeting its customers' need for speed, flexibility, reliability, economy, and convenience in transportation service, for-hire trucking started on the proverbial shoestring, has boosted its annual income from next to nothing in 1904 to nearly five billion dollars in 1953.

A versatile industry, for-hire trucking plays many roles. It's the common or contract carrier, operating over regular or irregular routes, carrying general or specialized commodities; it's the exempt carrier, moving the nation's agricultural commodities; it's the cartage operator, providing local pick-up and delivery service; and it's the big intercity tractor-trailer operation, a vital link in the chain from manufacturers to consumers. But, regardless of its name, it's the industry which owes its existence solely to the service it renders to other industries.

Big Business

Most business men realize that for-hire trucking is big business, yet, beyond the vague appreciation that it's "big," few of us are aware of the industry's true size and

scope. Statistically, it is impossible to determine exactly how big for-hire trucking is, because of the many operations for which data is unavailable.

The data which is available primarily concerns ICC-regulated carriers and offers a fair profile of this phase of the industry. As of April 1, 1955, the ICC estimates that there were 51,330 companies operating for-hire truck services. This includes 18,330 common and contract carriers using 346,000 vehicles and 33,000 exempt carriers operating 243,000 vehicles.

According to the ICC's Bureau of

"For Hire" Trucking—An Industry Serving Industry

Consciously or subconsciously, most people think of the trucking industry in terms of the "For Hire" carrier. Within the industry, we know that although this group is by no means all of the trucking industry—or even its largest segment—its members are certainly among the leaders in the efficient use of truck transportation.

So this is a salute to the "pros" of trucking, who depend for their success on the service that they can provide to other industries; to the fleetmen who are constantly searching for ways to improve this service, and whose efforts lead the way to more efficient methods and equipment for other truck users.

From *Commercial Car Journal*, a low bow to all for-hire carriers, local and intercity, common, contract, and specialized.

Transport Economics and Statistics, operating revenues of Class I, Class II and Class III (gross revenue determines carriers' class), carriers rose from \$1,351.9 millions in 1944 to a preliminary estimate of \$4,926.4 millions in 1953. Revenue in 1953 was earned by handling an estimated 73 billion ton-miles of cargo in intercity service.

Common Carriers

Largest segment of the ICC-regulated carriers is the common carrier group, totalling 15,686 carriers in 1953. Of this group, most available data concerns Class I carriers

—those with of \$200,000 or

According published by Assns. and j

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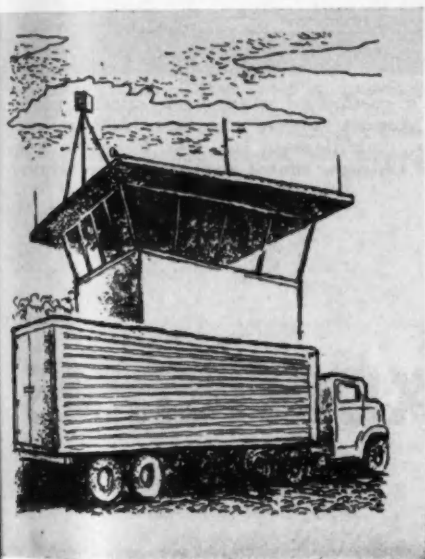
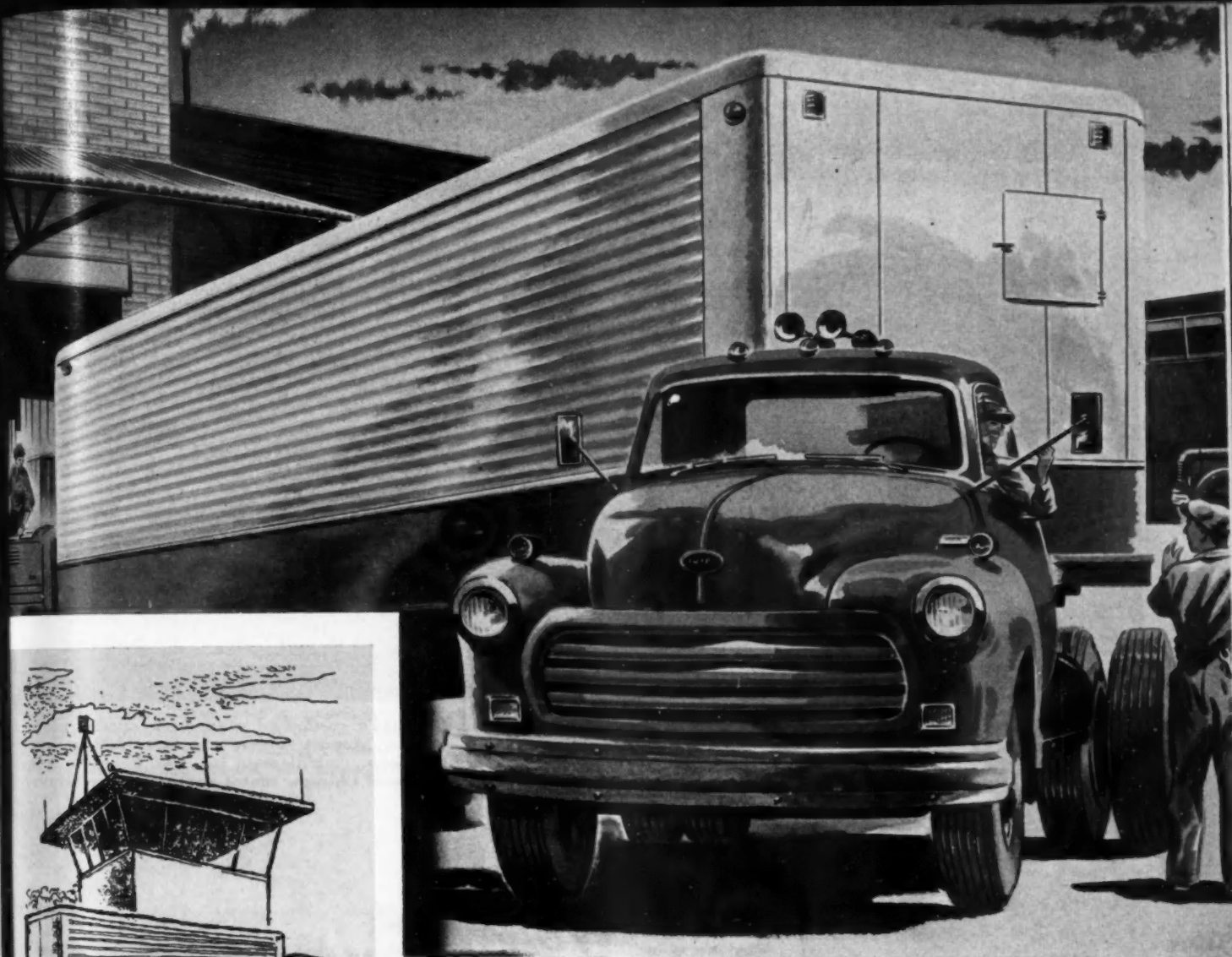
cents per in 1950, loads av

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COMMERCIAL C





(397 miles) shortest in New England (135 miles). Heaviest loads were moved in the Pacific region (11.87 tons), lightest loads (7.61 tons) in New England.

In 1954 there were 2,026 Class I intercity carriers with total gross revenues of \$3,416 millions (down 2.8% from 1953), tonnage totaling 261,896,506 tons (down 3.9% from 1953) and total mileage of 6,469,381,701 miles (down 4.4% from 1953). They spent \$2,977,126,086 for operating and maintenance expenses in 1954 compared with \$3,072,562,295 in 1953. They paid \$185,774,685 for operating taxes and licenses in 1954, compared with \$170,567,465 in 1953.

Preliminary figures show an upward business trend, beginning in the last quarter of 1954. Latest report from ATA shows that in the

second quarter of 1955 intercity truck tonnage is up 14 per cent over the same period in 1954 and 6.2 per cent above the record second quarter level of 1953.

Based on 1953, Class I intercity carriers had an average of \$587,395 invested in operating property, earned an average gross revenue of \$293 per \$100 of investment. Gross revenue averaged 50.1¢ per intercity vehicle mile, \$12.61 per intercity ton.

Vehicle operating costs in 1953 averaged 10.9¢ per intercity vehicle mile in 1953, compared with 10.2¢ in 1950. These costs breakdown as follows: In 1953 repairs and servicing cost 5.6¢ compared with 4.8¢ in 1950; fuel cost slightly more at 3.4¢, compared with 3.3¢ in 1950; while tire and tube costs were 1.9¢ down from 2.1¢ in '50.

—those with annual gross revenues of \$200,000 or more.

According to "Trucking Trends," published by American Trucking Assns. and just off the press:

In 1954 there were 2175 Class I common carriers.

In 1953 Class I intercity common carriers moved an average load of 9.01 tons an average of 242 miles, earned average gross revenue of 5.7 cents per intercity ton-mile. In 1950, loads averaged 9.00 tons, trips averaged 235 miles and revenue averaged 5.0 cents per ton-mile. Longest average hauls in 1953 were in the Rocky Mountain region



Pennsylvania Railroad's eastbound piggy-back special meets its westbound partner. August volume was over 1500 trailers, says Rail-Trailer Corp., middleman for the Pennsy's New York-Philadelphia and Chicago motor carrier trailer service

Piggy-Back Experiences

Motor carriers find late arrivals and no real cost advantage

VIF COSTS come down and schedules are improved, what can the motor carrier industry expect of trailer-on-flatcar service? Much depends on whether the bugs in the service as developed to date can be eliminated. For at present, according to three of the biggest users—Spector, Cooper-Jarrett and Mid-States—putting their freight on flatcars is neither cheaper nor faster than conventional over-the-road hauls.

Up To 25 Per Cent

Officials of the three firms agree, however, that with more time to grow in and with more loads to

By Phil Hirsch

grow on, TOFC's benefits to the truck operator should increase.

Ted Baker, Spector's senior vice-president, sees a possibility that up to 25 per cent of the nation's motor common carrier shipments will someday move by flatcar. "Once we know the service is workable," he explains, "we can take it into consideration in planning capital investment. For example, instead of keeping enough tractors on hand to move say 90 per cent of our peak business, we might keep only enough to meet 75 per cent of the

need, use flatcars to move the rest. A plan like this would produce sizeable reductions in both our operating and overhead costs."

Baker believes TOFC might also help reduce the nagging problem of handling costs at the truck terminal. Present TOFC trailers are 35 ft long. But shorter units could be built which would make it possible to pick up and deliver LTL freight without necessitating a stop at the trucker's dock to break up the load.

Late Arrivals

TOFC's biggest disadvantage at present is familiar to any motor

Spector's Ted Baker, president of motor carrier division, says TOFC is not using the service

Gro

barriers to

carrier who v... ing previous... make the idea... now, schedule... proved.

Runs between... and New York... and Philadelphia... posed to arrive... and morning... according to C... executive vice... Cooper, trailer... three or four... "When you're... \$2.50 an hour... tor is costing... (TURN TO NEXT

COMMERCIAL CAR



Spector's Ted Baker sees a possibility that up to 25 per cent of motor carrier shipments may someday go piggy-back. Advantage cited by both Cooper-Jarrett and Spector is that using the service avoids the uncertainties of trip leasing

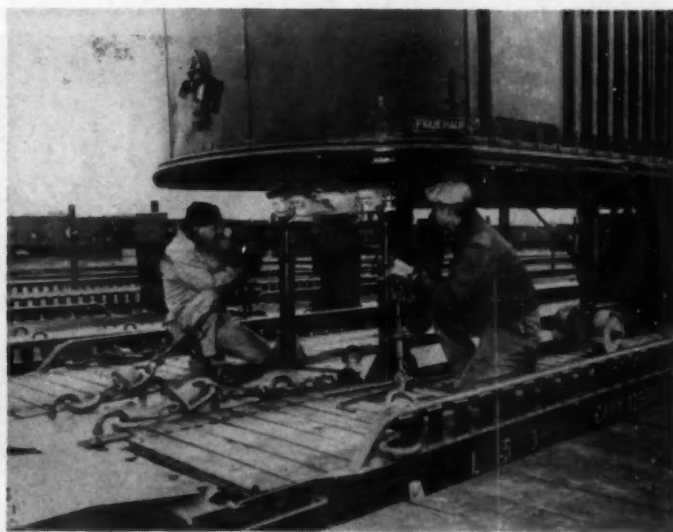
Growing Pains

barriers to more use of service

carrier who was around during previous attempts to make the idea click. Then as now, schedules could be improved.

Runs between both Chicago and New York and Chicago and Philadelphia are supposed to arrive early the second morning. However, according to Cooper-Jarrett's executive vice-president Guy Cooper, trailers often arrive three or four hours late. "When you're paying a driver \$2.50 an hour and your tractor is costing at least that (TURN TO NEXT PAGE, PLEASE)

Rail-Trailer crew lashes down front end of trailer. Two screw jacks hold beam that fits on fifth-wheel king pin. After lashing turn-buckles are pulled up tight, trailer dolly wheels are raised to clear flatcar deck. Wheel chocks that clamp to flatcar floor and a similar turn-buckle rig are used for rear end of the trailer



Piggy-Back Experiences Growing Pains

Continued from Page 69

much, delays like this can be expensive," he adds.

Two of the firms using C&GW's flatcar service—Werner Transportation Co. (between Chicago and the Twin Cities) and Watson Bros. Transportation Co. (between Chicago and Kansas City)—report similar troubles. Officials of both firms say, in effect, "Guarantee that the loads arrive early enough on the second morning to make our first city delivery runs, and our TOFC volume will increase appreciably." Werner's Pete Greenberg estimates that as much as 20 per cent of his firm's business could travel by rail with such assurance.

Less Time — More TOFC

Says Cooper (and Baker uses almost identical words), "If trip time could be cut and second morning delivery schedules maintained, we would not divert any of the loads presently carried over-the-road in our own equipment. But, as our business increased, a substantial percentage would move via flatcar. The better the schedules, the greater would this percentage be."

On the positive side, piggy-back produces one major advantage as

far as Cooper-Jarrett and Spector are concerned. It avoids the uncertainties of trip leasing. Instead of signing up "gypsies" a day or two before a peak volume is expected and then praying that the peak will materialize at the time and in the volume anticipated, the firms can wait until a few hours before the loads are scheduled to depart, decide how much can be handled with their own tractors, and then ship the rest off to the railroad freight yard.

Mid-States uses few trip leasers. Commented one of the firm's officials, "We move via rail when our own available equipment is tied up, or when some other unusual situation arises that prevents us from meeting the demands of our customers with our own facilities."

Spector currently is moving between 12 and 15 per cent of its total shipments by flatcar, Cooper-Jarrett between 7 and 8 per cent, and Mid-States between 10 and 15. In the case of all three firms, loads are almost entirely those remaining after available company highway equipment is filled.

Cost Differences

Cooper says there is no difference between trip lease and TOFC cost.

Baker says that TOFC is somewhat higher. Mid-States feels that all three rates—TOFC, trip leasing, and the cost of moving loads over the road in its own rigs—"are competitive." Officials of the three truck lines refuse to go into further details. However, since they all use the Pennsy, some idea of costs can be obtained by a glance at rates:

Between Chicago and New York, charges start at \$165 for a gross load of up to 32,500 lb, and rise to \$190 if the load reaches 42,500 lb. Above this point charges amount to 60 cents per cwt or portion thereof. The rate between Philadelphia and Chicago ranges from \$150 to \$172.75 and goes up 55 cents per cwt after that point.

Figures for TOFC service between other points are: East St. Louis to New York—\$193, \$222.50, 70 cents; East St. Louis to Philadelphia—\$178, \$205, 65 cents; Pittsburgh to New York—\$87, \$101, 32 cents; Pittsburgh to Chicago—\$97, \$112, 35 cents; Pittsburgh to East St. Louis—\$122, \$140, 44 cents.

Eight dollars per load is added to these charges. This is the fee charged by Rail-Trailer Co., which loads and unloads all motor common carrier trailers shipped via Pennsy's Truc-Train service.

If the trucker leases his trailer from RTC's subsidiary, Van-Car Co., there is an additional charge (\$30 for a load sent from Chicago to New York). Rail-Trailer officials say this is less than the gypsy's price. Since RTC takes the box back at the destination end, the trucker doesn't have to pay for a return trip unless he has a load.

Here are typical rates on the C&GW, which has been offering motor carriers TOFC service since 1936:

Between Chicago and the Twin Cities, the charge for a trailer less than 28 ft long and weighing 20,000 lb gross or under is \$60 (a minimum of two trailers must be shipped to qualify for this rate). Between Chicago and Council Bluffs, Iowa or Kansas City, Mo., the charge for the same trailer load is \$68.75. For loads weighing more than 30,000 lb (over 28

(TURN TO PAGE 126, PLEASE)

Rail-Trailer Corp. does loading of motor carrier trailers for Pennsy's TOFC service. Presently flatcars are end-loaded, a time-consuming process compared to side-loading. Rail-Trailer expects to cut overall shipping time by several hours when equipment and facilities for side-loading become generally available



HERE'S A brush washer everything ex through it an as anything cording to A dent of eq Penna. Bus L Made up in of approxima chine provide tergent, a rin run through. down the side drag above s the man has t down the fron coach goes thr

Rotary Brush

This is the we have seen tary brush. M for spraying o tergent, leavi move scum fo It is agreed o brushes are to is the mechan controls beco cated. This simple, troubl build. Here parts used in

The mecha Fuller types a ket. They ar pipe which ar saddle bearing angle iron fra the wheel gu Two/hp redu the brushes pulleys and be reduction.

Piping and Fr

The pipes f as a frame. helps to supp brush bearing in blocks whic to the concre and bracing a angle iron. S tergent nozzle regular washe

The deterge is pumped to a 1/2-hp mot pump from a

(TURN TO P

HERE'S A home-made rotary brush washer that does just about everything except herd the coach through it and just as efficiently as anything on the market, according to A. J. Holt, superintendent of equipment, Southern Penna. Bus Lines.

Made up in the shop at a cost of approximately \$550 this machine provides for a spray, a detergent, a rinse as the coach is run through. Rotary brushes wash down the sides while the mop type drag above swashes the top. All the man has to do then is to swab down the front and back after the coach goes through the washer.

Rotary Brushes

This is the first home-made unit we have seen incorporating a rotary brush. Most of them provide for spraying of water and/or detergent, leaving any hard-to-remove scum for the "idiot stick." It is agreed of course that rotary brushes are to be desired. Trouble is the mechanical hookup and the controls become rather complicated. This unit appears to be simple, trouble free and easy to build. Here is a breakdown of parts used in this construction.

The mechanical brushes are Fuller types available on the market. They are mounted on 2-in. pipe which are set in self-aligning saddle bearings attached to the angle iron framing at the top and the wheel guide at the bottom. Two/hp reduction motors power the brushes separately through pulleys and belts in another 4 to 1 reduction.

Piping and Frame Combined

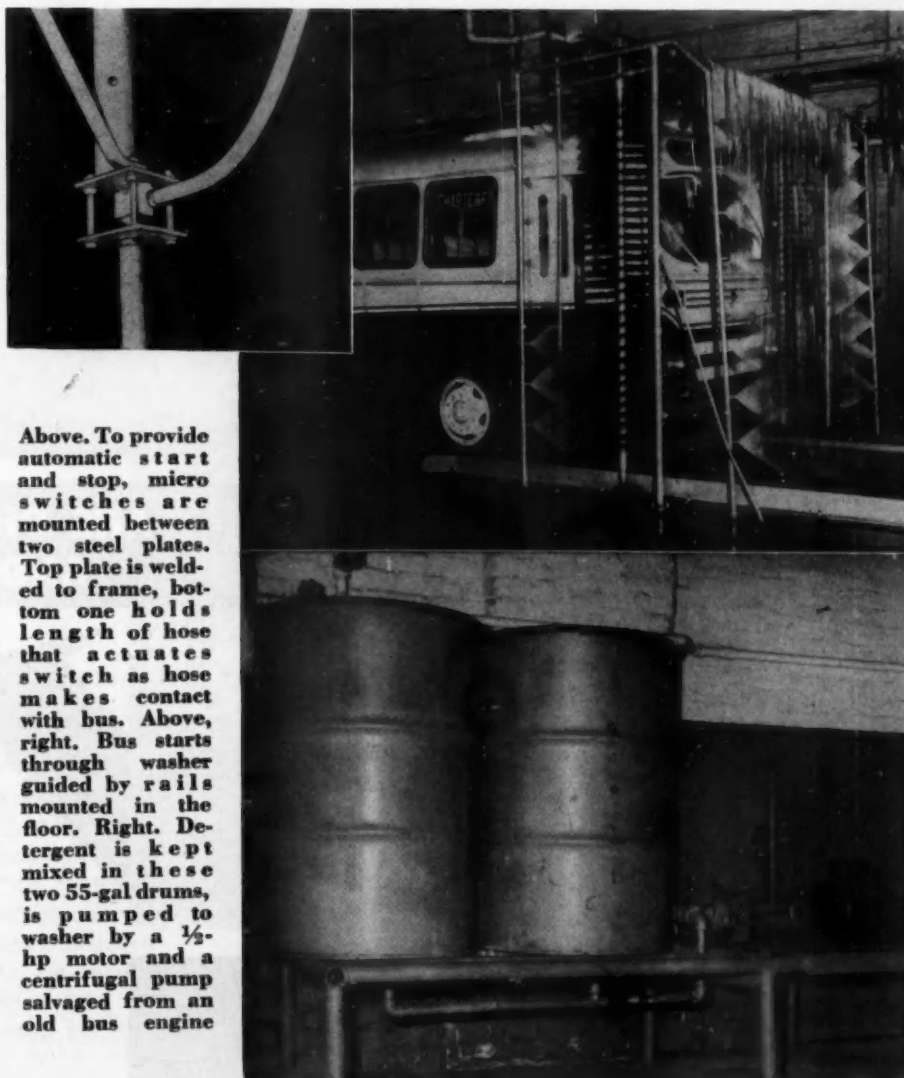
The pipes for the washer serve as a frame. Another 2-in. pipe helps to support the motors and brush bearings. The pipes are set in blocks which are in turn bolted to the concrete floor. The cage and bracing above are of 2½-in. angle iron. Spray nozzles and detergent nozzles are those used in regular washers.

The detergent is kept mixed and is pumped to the nozzles through a ½-hp motor and centrifugal pump from a bus engine, con-

(TURN TO PAGE 122, PLEASE)

Southern Penn Builds Rotary Bus Washer

Rotary brushes on the sides and a mop-type drag on the top combine with an automatic spray-detergent-rinse cycle in this unit that does a bus in under 10 minutes

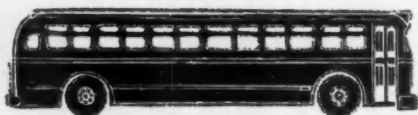


Above. To provide automatic start and stop, micro switches are mounted between two steel plates. Top plate is welded to frame, bottom one holds length of hose that actuates switch as hose makes contact with bus. Above, right. Bus starts through washer guided by rails mounted in the floor. Right. Detergent is kept mixed in these two 55-gal drums, is pumped to washer by a ½-hp motor and a centrifugal pump salvaged from an old bus engine

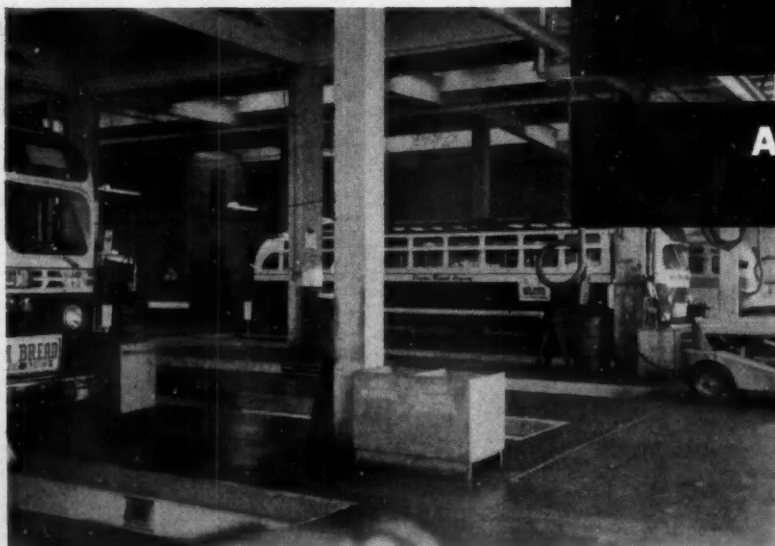
At Virginia Transit

All Dirt Goes Down the Drain

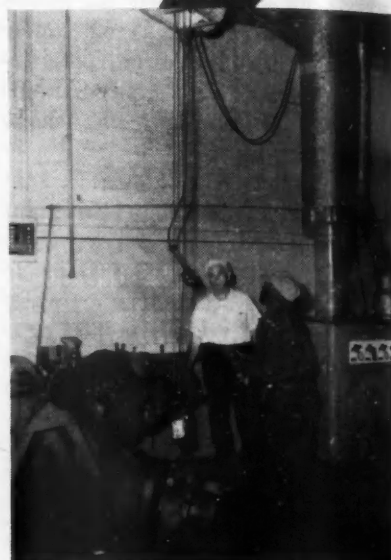
First stop for any component removed
from bus is a tile-lined steam bath



Below. Component overhaul begins with removal of units in the pit inspection area. Fork lift trucks or dollies carry engines, converters or rear ends to cleaning room.



**MAJOR COMPONENTS
REMOVED HERE**



**IN NEW
TILE LINED ROOM**



**ARE DISASSEMBLED
AND CLEANED**

Above. Two views of the cleaning room show its tile-lined walls, end-to-end floor drain and some of its equipment. This includes steam cleaner, several tank cleaners, and an overhead electric monorail crane. At day's end the entire room gets a steam bath.

**INS
SALVA**

Above. Between parts storage lie room. Here all for scrap or saved parts are drawn parts department

Above. engi from for n Sma in o shaft

Right. Final step and span includes full m From here reb are returned to waiting coach dolly. Boom cr

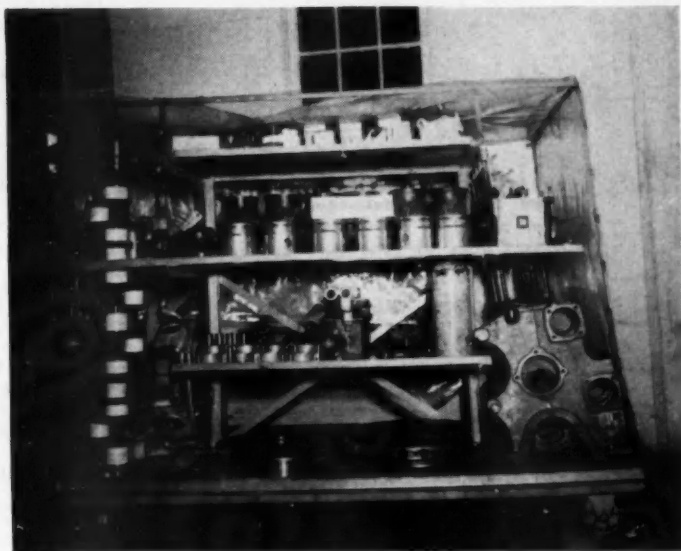
! EVEN TH
it's Norfolk she the remarkable prevails. The cleaning room disassembled, a ments which p to the rebuild has attempted panying series that fleet oper therefrom. Yo Equipment W. top-grade layou



NEW PARTS ADDED

INSPECTED FOR SALVAGE OR RENEWAL

Above. Between cleaning room and parts storage lies this special inspection room. Here all worn parts are removed for scrap or salvage. New or rebuilt parts are drawn from the adjacent parts department.



THE COMPLETE ASSEMBLY

Above, right. This is how a complete engine assembly looks as it emerges from the inspection room and is ready for reassembly in the unit rebuild shop. Smaller new parts (top row) are left in original containers, others like crankshaft are carefully protected.

Right. Final step is reassembly in this spic and span rebuild shop which also includes full machine shop facilities. From here rebuilt major components are returned to stock or dispatched to waiting coach via fork lift or wheeled dolly. Boom cranes help too.



GOES ON TO REBUILD SHOP

EVEN THE casual visitor to Virginia Transit's Norfolk shops is immediately impressed with the remarkable cleanliness and efficiency which prevails. The secret lies in the new tile-lined cleaning room where all major components are disassembled, and in the arrangement of departments which permits an uninterrupted flow back to the rebuild shop. **COMMERCIAL CAR JOURNAL** has attempted to recreate this flow in the accompanying series of pictures and captions, believes that fleet operators in all vocations can profit therefrom. You can credit Superintendent of Equipment W. C. King and his able staff for this top-grade layout.

Riley Saves \$4000 per Year on Propane

1. Gasoline Saving —

Trucks travel 10,000 miles per year, get an average of five miles per gallon for an average fuel consumption per truck of 2000 gallons per year.

For each gasoline-powered unit, annual fuel cost is $2000 \times 28¢$ or\$ 560.00
For each propane-powered unit, annual fuel cost is $2000 \times 20¢$ or 400.00

The difference or saving per truck is\$ 160.00

Total fuel cost saving for 13 propane-powered trucks is\$2080.00

2. Oil Saving —

Gasoline-powered units have a 5-qt oil change every 1500 miles at a cost of 15¢ per qt. One to three quarts of oil are added per week. Oil changes are made about every 7½ weeks or about seven changes per year. Propane-powered units have a 5-qt oil change every 3500 miles on the average. Oil added per week ranges from .06 (one quart per oil change) to two quarts. Oil changes are made about every 17½ weeks or about three times a year.

For each gasoline-powered unit, annual oil cost ranges from a minimum of $7 \times 5 \times 15¢$ plus $52 \times 15¢$ or \$13.05, to a maximum of $7 \times 5 \times 15¢$, plus $52 \times 3 \times 15¢$ or\$ 28.65

For each propane-powered unit, annual oil cost ranges from a minimum of $3 \times 5 \times 15¢$ plus $.06 \times 52 \times 15¢$ or \$2.72, to a maximum of $3 \times 5 \times 15¢$ plus $52 \times 2 \times 15¢$ or 17.85

The difference or saving per truck is\$ 10.80

Total oil cost saving for 13 propane-powered trucks is\$ 140.40

3. Savings on major overhauls —

Gasoline-powered trucks need overhauls every two years. Propane-powered trucks require overhauls every seven years. Cost of overhaul is about \$400.

For each gasoline-powered truck, annual overhaul cost is $\$400 \times 1/2$ or\$ 200.00
For each propane-powered truck, annual overhaul cost is $\$400 \times 1/7$ or 57.14

The difference or saving per truck is\$ 142.86

Total overhaul cost saving for 13 propane-powered trucks is\$1857.18

4. Total Annual Savings produced by propane-powered trucks is\$4077.58

LP Gas Conversions Save \$300

Cheaper fuel, improved oil life, reduced engine wear rate save this 15-truck fleet \$4000 per year. The propane conversions cost Riley only about \$400 per tractor

RILEY Cartage Co., Chicago, saves about \$4000 a year by operating 13 of its 15 trucks on propane (LP gas) instead of gasoline. The propane-powered equipment includes both new and old units with models ranging from 1936 jobs to brand new tractors..

Fuel Savings

Riley pays 20 cents a gallon for propane. Fuel for his two gasoline-powered jobs costs 28 cents a gallon. Since each truck travels about 10,000 miles a year and



Control on da

Overhead view and gasoline c

Below, Riley fuel tanks mo



per Y

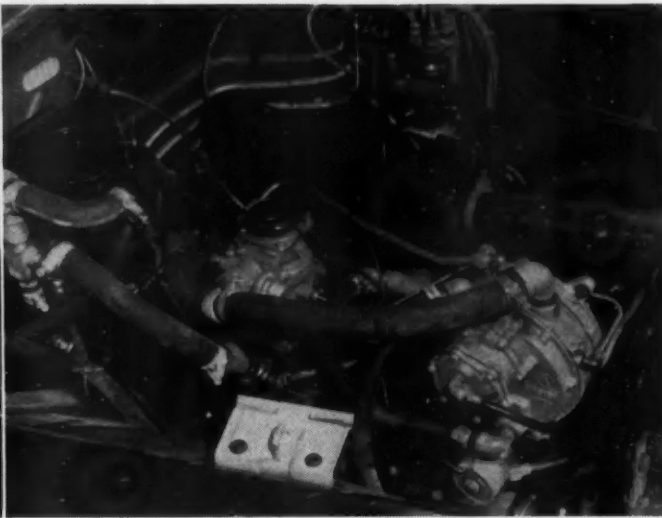
gets an aver William Riley annual saving

Oil Savings

With each 5-qt crankcas 1500 miles. C to be added al three quarts



Control on dash permits switch from propane to gasoline



Overhead view of the engine showing Ensign converter and gasoline carburetor with connections for LP gas use

Below. Riley trucks are equipped with saddle-bag type fuel tanks mounted on frame just behind the truck's cab



per Year per Truck

gets an average of five miles per gallon, President William Riley figures the 8-cent difference means an annual saving of about \$2000 for the 13 trucks.

Oil Savings

With each gasoline-powered unit, the (average) 5-qt crankcase has to be flushed and refilled every 1500 miles. On one gasoline-powered job, a quart has to be added about once a week. On the other, it's about three quarts a week. Cost of oil per 1500 miles thus

ranges from \$1.87 to \$4.11 (based on a cost of 15 cents per quart).

On propane, Riley has run as long as 5000 miles between oil changes. The average is around 3500 miles. One quart of oil is added between changes, on the average.

So, for the propane-powered equipment, oil cost ranges from \$.47 to \$2.57 for each unit per 1500 miles. Comparing these figures with those for gasoline, the average saving comes to \$1.50 for each of the 13 propane-powered units, or a total of about \$20 for all of them every 1500 miles. On an annual basis, this saving amounts to about \$130.

Overhaul Savings

Riley's gasoline-powered units get a major overhaul every two years. The fleet's 1947 propane-powered equipment was overhauled for the first time in 1954. All three trucks had original valves and rings in when the job was started.

Based on this experience, the firm figures conservatively that its propane equipment will run at least seven years between major overhauls, as opposed to two with gasoline. Average cost of one overhaul is \$400. In seven years on propane, Riley is saving the equivalent of 2½ overhauls per truck, or approximately \$1000. For all 13 trucks this means a cost reduction of \$13,000 during the seven-year period, or about \$1800 a year.

Fuel is Readily Available

Probably the first question most people ask when anyone brings up the subject of propane is, "Where do you get it?" Riley operates about 99 per cent of the time within the Chicago Metropolitan Area. On a typical trip, loads of from 24,000 to 41,000 lb will be carried a distance of from two to 25 miles. A major portion of Riley's work is with a local can company, hauling semi-finished cans between its plants.

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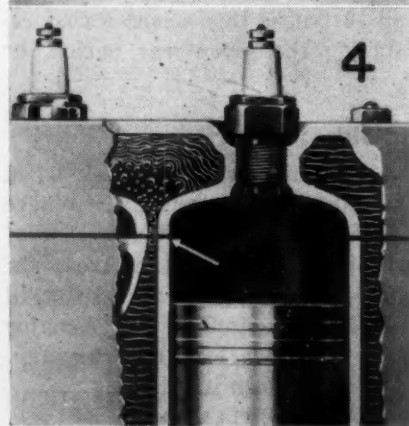
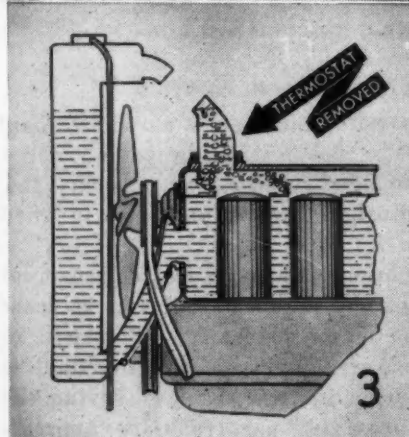
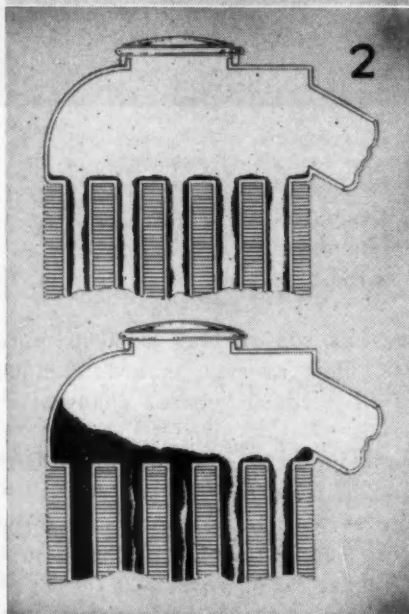
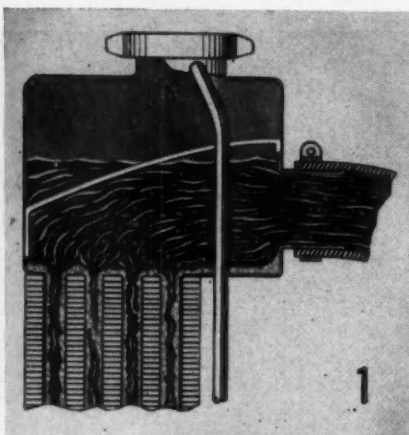
Keep

THE COOLING

SYS

It's time to make war on rust and corrosion and leakage. Timely flushing, use of good inhibitors, periodic PM will lengthen engine life

Photos courtesy



▼ IN THE following discussion we will confine our attention principally to the most frequent cooling system problems encountered by the fleet operator. Most commonly suffered—and sadly enough—commonly tolerated, is cooling system corrosion and leakage.

Let's examine how the presence of even moderate degrees of these conditions can result in costly loss of engine service life.

Rust and scale deposits at the water side of combustion chamber walls, exhaust valve seats and cylinder bores, seriously impede the transfer of combustion heat to the coolant. The same deposits carried over by coolant circulation to the tubes of the radiator prevent the heat within the coolant being dissipated to the outside air. Further accumulation clogs these narrow water passages resulting in overflow loss and immediate cooling failure.

1. Rust provides an insulation in itself, but when loosened also causes clogging of the radiator tubes

2. Hard scale builds up slowly and progresses to degree shown here when adequate cleaning measures are slighted

3. Bubbles in water opening showing up while engine is running under power indicates leakage of exhaust gas into coolant

4. Loose cylinder heads are prime cause of gas leakage. Such aeration may speed up rust formation and corrosion 30 times the normal formation of restrictions

Engine Heat

Sometimes the service man fails to realize how directly the operation of the cooling system affects the service life of the engine. The intense heat of combustion, as high as 4500 deg. F., causes engine components, such as valves, pistons and rings, to operate near their critical capacity. Although approximately half of the waste heat is rejected through the exhaust system, the remainder must be continuously and quickly transferred through the engine metals to the coolant. When such transfer is obstructed, damage due to burning, thermal distortion or lubrication failure rapidly follow.

Excessive metal temperatures also promote abnormal combustion, such as, detonation and preignition. The resulting combustion pressure rises further accelerate the aforementioned engine damage and severely stress the cylinder head joint, pistons and bearings.

Heavy duty engine manufacturers regard the problem of rust and scale deposits with serious concern. The service department of a major truck and bus manufacturer has determined that the most frequent cause of unsatisfactory engine service life is excessive metal temperatures caused by corrosion deposits in inner walls of the cooling system.

The problem becomes double edged when we realize that once hard rust deposits accumulate in the high temperature areas of the

water jacket difficult to remove accessible areas deposit accumulation impossible to

Such a condition the remaining cylinder block

It pays well ing system cr a major engine deal of grief storing adequately a newly overh

In view of creasing comp resultant increase temperatures transfer will important in engine service.

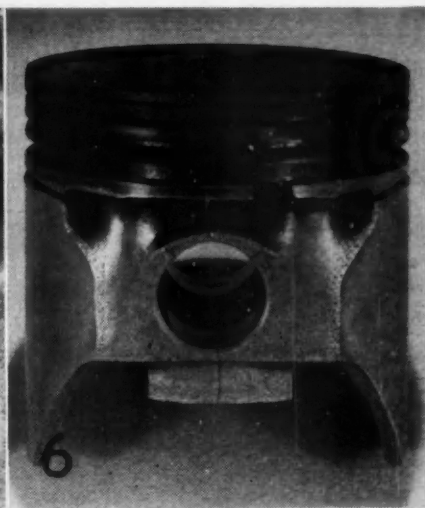
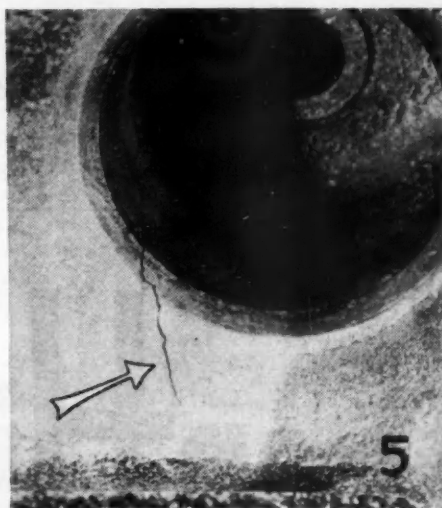
The engine provide satisfaction by proper design application, but built in corro



G SYSTEM

Clean

Photos courtesy National Carbon Co.



water jacket it becomes extremely difficult to remove them. In inaccessible areas of the jacket interior, deposit accumulation is virtually impossible to remove.

Such a condition has impaired the remaining service life of the cylinder block or head.

It pays well to examine the cooling system critically at the time of a major engine overhaul. A great deal of grief can be avoided by restoring adequate heat transfer to a newly overhauled engine.

In view of the trend of ever increasing compression ratios—with resultant increases in combustion temperatures—adequate heat transfer will assume an even more important influence in future engine service.

The engine manufacturer can provide satisfactory initial cooling by proper design and material application, but he cannot provide built in corrosion protection.

Now that we have exposed the effects of corrosion deposits, let's consider the cause and then the prevention.

Stop the Corrosion

Repeated examination of deposits removed from failed systems revealed in most cases that 90 per cent of the material is rust, with small amounts of water scale. Simply stated, rust is the product of iron plus water plus oxygen. The oxygen may be that which is contained in the water, or from the air which may be trapped within the water. From this it is apparent that the cast iron water jacket in continuous contact with a water coolant, has all the requirements to produce copious amounts of rust—and it does, if preventive measures are not taken.

Exhaustive investigation of the mechanism of rusting has established

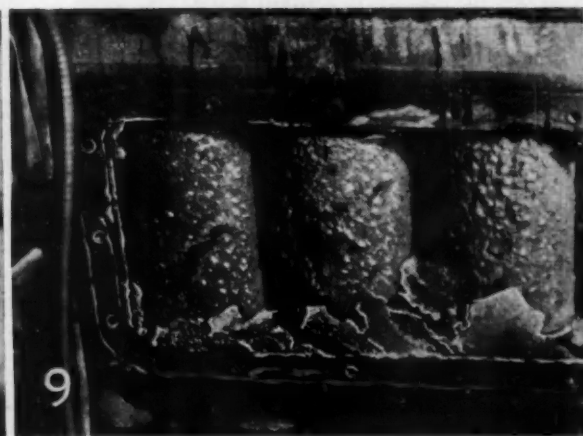
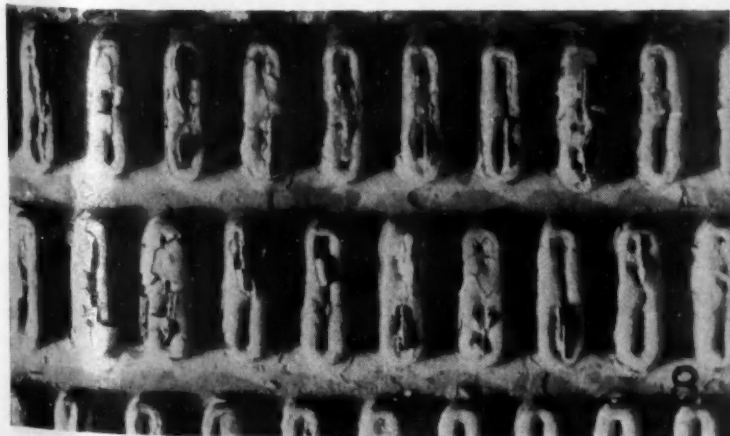
(TURN TO PAGE 144, PLEASE)

5. Cracked block at valve seat is a common result of restricted circulation and the resultant over heating

6. This piston has failed as a result of an overheated block—a common result of poor circulation

7. This scored piston is another result of overheating. Sticking pistons and cracked valves may also result

8. Here is an advanced stage of build up in the radiator tubes caused by lime deposits. 9. Rust deposits may reach this stage when proper inhibitors and cleaners are not used





\$10 →

Shop Hints

Make a simple drawing of your home-made tools. Take a picture of the shop equipment you have built. Send us a brief description. We will pay \$10 and \$25 to those who submit good ideas for improving maintenance

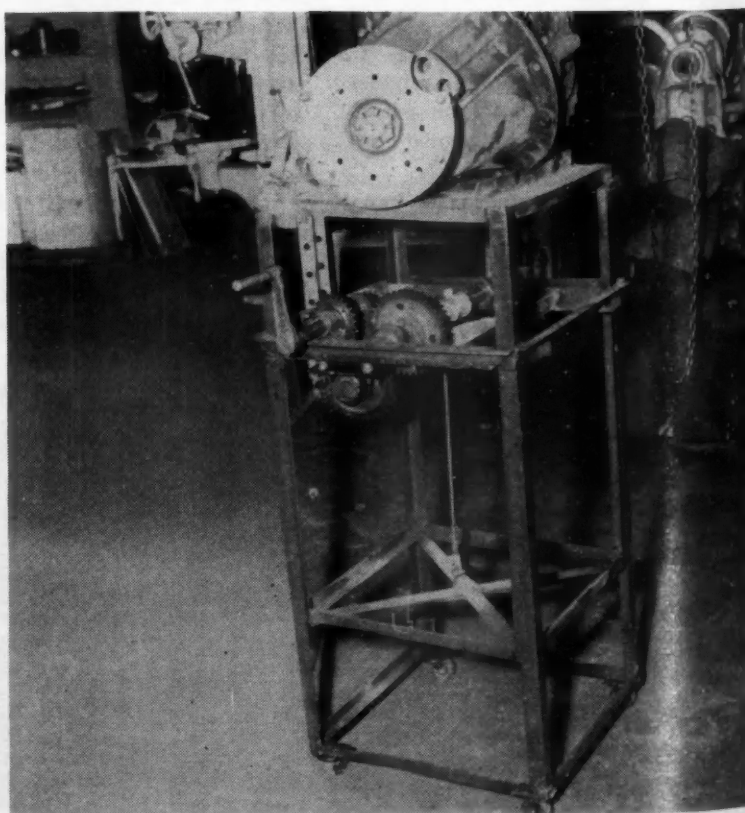
\$25 ↓

Differential Hoist

From the shops of Intertown Suburban Lines
Detroit, Mich.

Intertown uses this shop-made hoist in pit work for removing differentials from coaches. The hoist's inner and outer frame are built of 1½-in. channel steel. The outer frame is stationary and mounted on casters for easy portability. The inner frame is raised and lowered by means of a hand crank and gear arrangement that pulls it up inside the outer frame. The gears came from a junked transmission. Top of the inner frame is designed with supports to hold the differential steady. The hoist has about a 3-ft lift.

This elevator-type lift is used in conjunction with a wheeled cart. The cart is built just wide enough to fit on rails running along the sides of the pit at floor level. The hoist is raised through the center of the cart, and the differential is dropped out onto the top of the hoist. The hoist is then lowered and the differential comes to rest on the cart. The cart can then be pushed off the pit rails to the appropriate service area.



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By C. B. Baker

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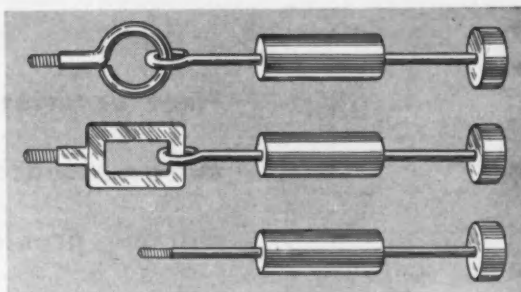
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Screw Eye Speeds Shackle Removal

By Stanley Clark, East Bradentown, Fla.

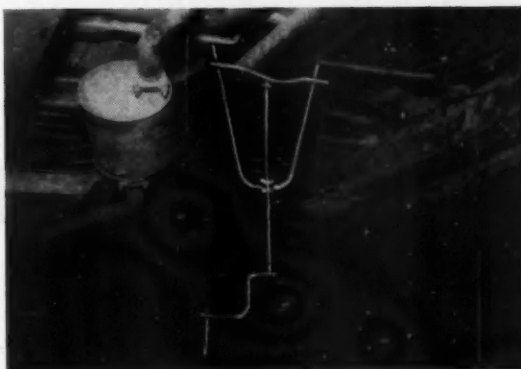
Since the end of a spring bolt may be parked behind the obstruction or frame that makes removal difficult and time consuming, here's a way to speed the job. Take a large screw eye and rethread it with $\frac{1}{8}$ -in. pipe thread to fit into the grease fitting hole. Hooking a slide hammer into the eye readily bumps the bolt out. If a screw eye isn't readily available, a good one can be made by cutting and threading a piece of $\frac{1}{4}$ -in. cold-rolled steel. You can also straighten the hook end of the slide and cut threads in that.



Jack Eases Torque Tube Positioning

By C. B. Baker, Shop Foreman, Md. State Roads Commission, Easton, Md.

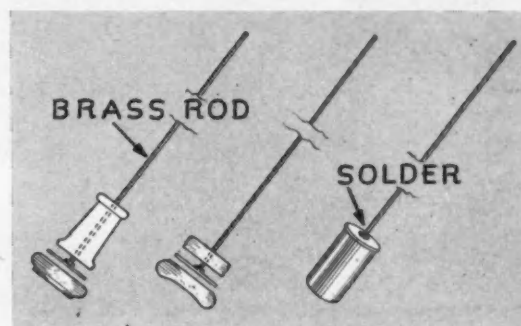
We have assembled this shop-made screw jack for positioning a Chevrolet torque when servicing the universal joint or for transmission removal. A U-shaped frame of $\frac{1}{2}$ -in. round iron hooks into existing holes in the body cross member. At the bottom of the frame is welded a $\frac{5}{8}$ -in. nut. A screw shaft, threaded to fit into the $\frac{5}{8}$ -in. nut and long enough to permit about 15 in. of travel inside the frame, supports a cradle which in turn holds the torque tube. The cradle is made of $\frac{1}{2}$ -in. iron rod and is guided by being looped around the "U" frame. Turning a crank at the bottom of the screw shaft raises or lowers the torque tube to the desired position.



"Stethoscopes" Locate Engine Noises

By J. W. McGill, Wright Truck Line, Stayton, Ore.

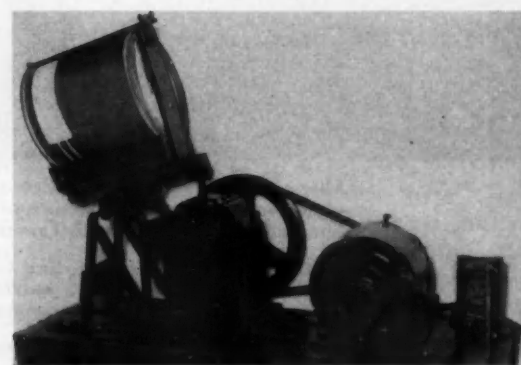
A home-grown stethoscope for locating engine noises can be easily made from an old telephone receiver, an old radio earphone or a frozen juice can. To use the receiver or earphone, unscrew the ear cap and remove the diaphragm, electromagnets and wires. Drill a $\frac{1}{2}$ -in. clearance hole in the back of the case. Solder the end of an 18-in. length of $\frac{1}{8}$ -in. brass rod in the exact center of the diaphragm. Replace the diaphragm in the case with the rod through the $\frac{1}{2}$ -in. hole and tighten the ear cap in place. To use, touch the end of the brass rod to the running engine. You can locate the faulty piston, bearing, etc., by the increasing intensity of the sound as the end of the brass rod on the engine approaches the source of the trouble. To use the juice can, simply solder the brass rod to the bottom of the can.



Reefer Compressor Becomes Paint Shaker

By G. A. Livingston, San Joaquin Bakery, Fresno, Cal.

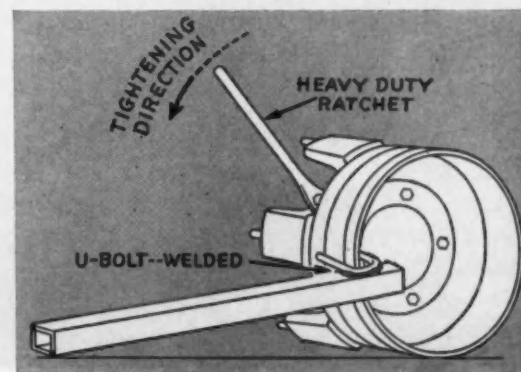
I made this paint shaker from a used refrigerator compressor, an old motor and some scrap metal at a cost of \$8. Cut off the compressor cylinder at the base leaving the piston rod sticking up slightly at the bottom of the stroke. Cover around the piston at top of the compressor with sheet metal to prevent oil splash and use a minimum of oil. Piston rod connects to the shaker base using the compressor wrist pin. The shaker base rocks on a used Ford universal joint supported by a framework of strap iron. The shaker is powered by a $\frac{1}{6}$ -hp motor with a 2-in. pulley. The whole rig is mounted on a section of 10-in. wide steel channel beam.



Jig Aids in Mounting Brake Drum

By Lee Miles, Wilson Freight Forwarding, Cincinnati, Ohio

The purpose of this tool is to hold the wheel while tightening the brake drum mounting bolts. To make this "king size" wrench, weld together two 4-ft lengths of angle iron to make a box section. At the top of one end, weld a heavy U-bolt. When placed on the wheel as shown at right, it will prevent the wheel from rolling as the brake drum mounting bolts are tightened.



Fleet experience indicates that air starters cut maintenance costs, eliminate cold weather starting problems, reduce tractor weight by 98 lb. Reduced load also cuts battery troubles

Air Starters Stop Troubles at Car



Above. The starter is bracketed to the fly-wheel housing on the left side of the engine. The motor is simple, with few moving parts

Right. The air brake coupling is used to replenish air supply at the starter air tank. Engine compressor keeps system charged

Below. Air starter tank is installed in cab housing under sleeper, measures 56 x 13 in.



V CAROLINA Motor Freight Corp. with 293 tractors, 50 trucks and more than 350 semi-trailers has been experimenting for a period of two years with air starters for diesel equipment. In 1953 the fleet purchased 53 COE Mack diesels equipped with air starters and a year and a half later added 40 units powered by the 170 hp END 673 diesel engine.

The maintenance shops at Cherryville, N. C., report that the light weight, easily-maintained starting systems not only reduce the annual repair bills, but cut weight of a modern diesel tractor by 98 lb. The air starting motors will kick over these heavy engines at a higher speed, resulting in faster, surer starts regardless of weather. Because these motors are only slightly affected by freezing temperatures



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The executive offices, home terminal and overhaul shop of Carolina Motor Freight, one of the South's largest

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Five of the 53 model H-61T Mack tractors equipped with air starting motors are lined-up at rear of shops



which rob electric storage batteries of up to 60 per cent of their efficiency, the air starters have eliminated the problem of cold weather starting.

The reduced electrical load on the 93 air-starting tractors makes a 24-volt system unnecessary, a 12-volt system being sufficient for lighting and other purposes. The result is the elimination of two Group 4 batteries, 20 ft of battery cable, a series-parallel switch, and a solenoid switch—in addition, of course, to the electric-starting armature. Also, the reduced load has increased the life of the remaining batteries and quadrupled the life of the generator.

After more than two years of operation, many of the same batteries are in service on the original 53 Macks that were in service at the time of their purchase in 1953. On the average, the com-

pany figures on replacing one of the two batteries each year. The generator in a 24-volt system is set at 48 amps and in a 12-volt system at only 32 amps. The period between repairs or replacement has been increased from three months to a full year. To date, with 53 units well into their third year of service, maintenance of the starting air systems has required just \$8.00 worth of parts and \$3.50 in labor per year.

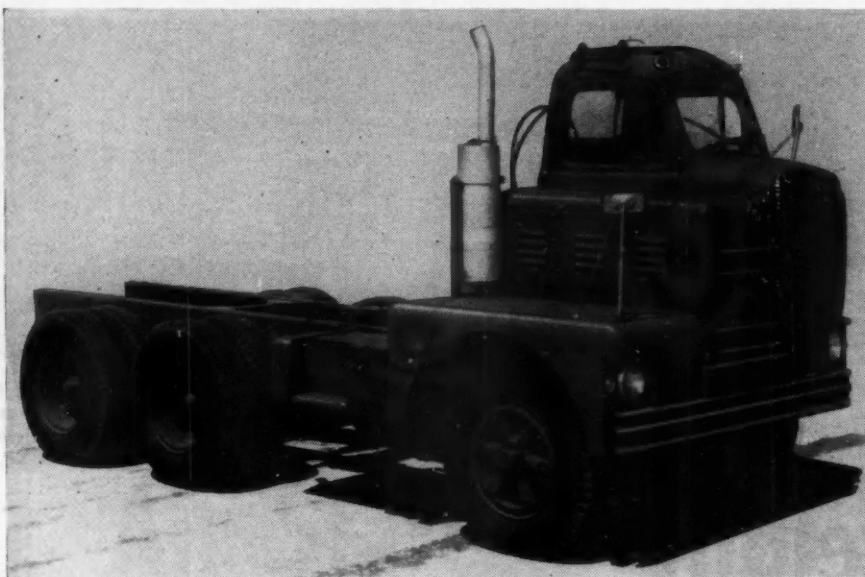
Conversion Requirements

As replacements for this equipment, a heavy-duty air-starting motor, a 56-in. x 13-in. aluminum starting-air tank, necessary control valves, and a short length of 5/8-in. copper tubing between one of the tractor's two brake tanks and the starting-air tank, have been installed. Installation of a new air compressor has been unnecessary, since the same 12-cu ft

compressor used to charge the two brake tanks is also used to charge the air-boosting system.

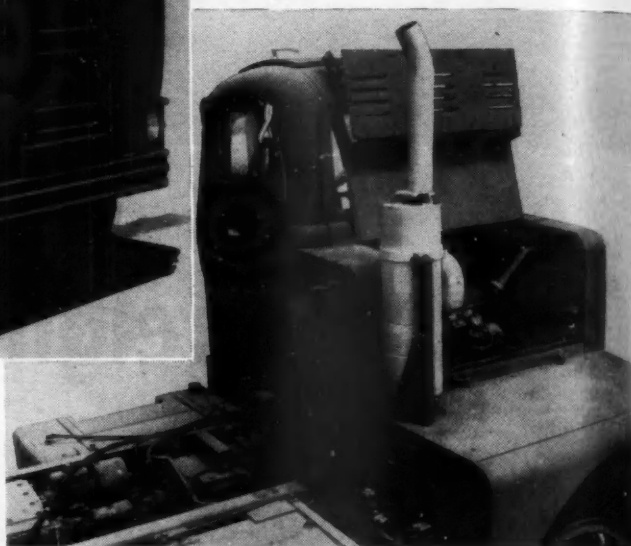
The air-starting motor, slightly smaller than a conventional electric-starting armature, is bracketed by means of three 5/8-in. bolts to the fly wheel housing on the left side of the engine. The storage tank is located in the cab housing, resting directly under the sleeper on two cradle blocks and secured by means of two heavy steel bands.

Basically, the starting air and brake systems are arranged as follows. A 3/4-in. copper line connects the air compressor on the right side of the engine to the No. 1 brake tank. A 5/8-in. copper line connects this tank with the No. 2 brake tank and another 5/8-in. line connects the No. 2 brake tank with the starting-air tank. In normal operation, the compressor (TURN TO PAGE 119, PLEASE)



New model weighs 11,286 lb, measures 59 in. from front bumper to back-of-cab, handles a 38-ft, 6-in. trailer within a 45-ft overall limit, has a wheelbase as short as 124 in.

Clutch, transmission and batteries are behind cab for easy working access. Engine is accessible by raising the hood or removing two slip-out panels located inside truck's cab



FWD Offers 6x4 ROAD TRACTOR

Weight shift to front drive axle results in up to 1800 lb more payload says maker

V NEW 6x4 road tractor with one man cab just introduced by Four Wheel Drive Auto Co., Clintonville, Wis., measures 59 in. from front bumper to back of cab. Use of front driving axle permits moving kingpin farther forward, transferring more weight to the front axle. FWD says up to 1800 lb of added payload can be added.

FWD has also announced a new deluxe series of triple combination

pumper fire engines. They feature redesigned compartment-type bodies, 4-wheel drive, 226 to 240-hp engines as standard equipment.

4-Wheel Drive

The new tractor, Model No. TS-647, uses FWD's power-proportioning center differential which distributes one-third of the engine power to the front driving axle and two-thirds to the rear driving

axle. Front axle weighs 5852 lb, rear axle 5434 lb, for a total weight of 11,286 lb.

The tractor can be engineered with a wheelbase as short as 124 in. from front axle to center line of rear bogie, 100 in. from front axle to forward rear axle.

38-ft Trailer

The new model can pull a 38-ft 6-in., 10-in. corner radius van trailer or a 39-ft 6-in. tank trailer and stay within a 45-ft limit. Or it can pull a 35-ft trailer, be equipped with a separate sleeper compartment and still stay within 45 ft overall.

The one-man cab is positioned at the extreme left side of the chassis, where the driver has maximum visibility for passing and for the road center-line danger zone. The cab has an escape hatch in the top in addition to the door in the left side and is designed for driver comfort.

Engine Options

Engine is mounted to the right of the cab, where it is easily accessible by raising its own hood or by removing two slip-out panels from the bottom right side of the cab interior.

(TURN TO PAGE 138, PLEASE)

COMMERCIAL CAR JOURNAL, October, 1955

Shop-on-w

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TAKING of the trailer mountain Exp trailer in a r able" shop is mechanics can electrical syst inflate and ch other jobs use can do these loaded or unlo the "Doctors" were built in

Army surplus Denver shops tools and equ



COMMERCIAL C

PIE's "Yard Doctor"

Speeds Trailer Service

Shop-on-wheels cuts mechanic man-hours, ups equipment utilization and saves valuable shop space

TAKING THE shop to the trailer instead of the trailer to the shop saves Pacific Intermountain Express at least one man-hour per trailer in a routine service check. The "portable" shop is PIE's "Yard Doctor." From it, mechanics can check and repair trailer air and electrical systems, grease, check brake linings, inflate and change tires, pack wheels and many other jobs usually done in the shop. And they can do these jobs while the trailer is being loaded or unloaded at the dock. PIE has six of the "Doctors" in use around its system. They were built in the fleet's Denver shops.

Army surplus provided the basic chassis, PIE's Denver shops added the compact arrangement of tools and equipment needed for trailer service

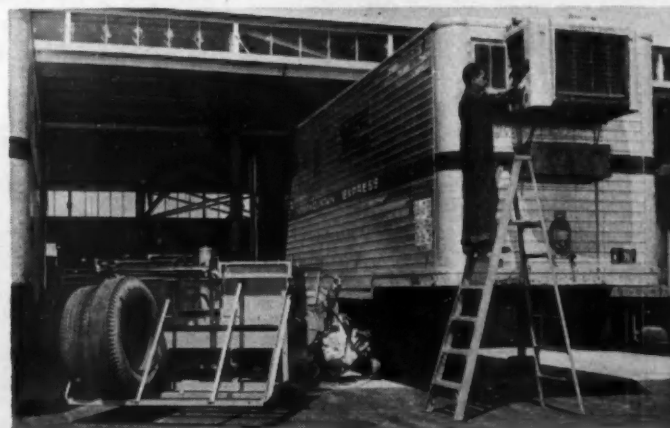


Greater utilization of trailers and dock space results when servicing is done at same time as dock men load the trailer



"Yard Doctor" uses power tools to further cut servicing time. Here, pneumatic wrench speeds running up lug nuts on tire

Rear view shows rack for extra tires. "Doctor" provides necessary equipment to keep a two-man service crew busy



New PRODUCTS

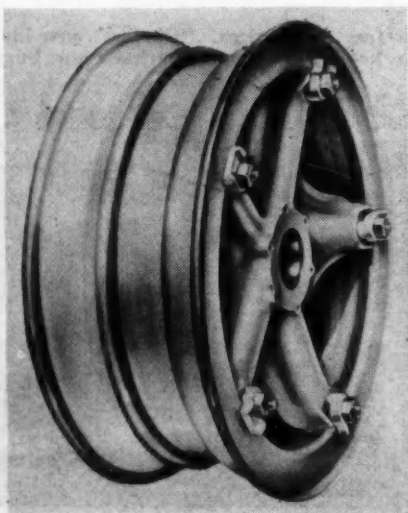
The latest developments in parts, accessories, tools and equipment for the fleet field, described in brief for your convenience

P1. Mufflers

Alexander-Tagg Industries, Inc., Hatboro, Pa., announces a line of multi-path, heavy duty, gas engine truck and bus replacement mufflers custom specified to the cubic inch displacement of truck and bus engines. They are designed to meet or exceed engine manufacturers' requirements as to back pressure. In addition, they fall well under the maximum permissible 125 Sone noise level standards established by the American Trucking Assn. and Automotive Manufacturers' Assn.

P2. Tubeless Tire Wheel

Dayton Steel Foundry Co., Dayton, Ohio, is manufacturing a new spoke-type, cast steel wheel for tubeless truck tires. It consists of a standard Dayton spoke-type, cast steel wheel and drum assembly for drop center rim and tubeless tires. The complete assembly has been road tested.



P3. Wheel Aligner

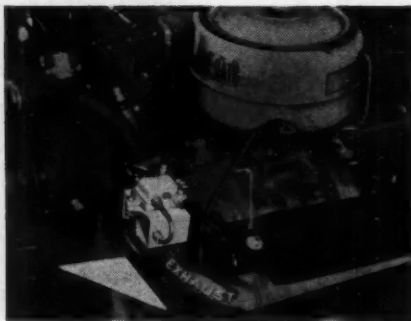
Hunter Engineering Co., St. Louis, Mo., announces its new "Lite-A-Line" wheel aligner equipment. It employs the light beam principle—six light beams record all wheel alignment readings. The light beams are projected to panel charts from the Hunter projectors, which are quickly installed on the front or rear wheels.

P4. Hole Drill

Pioneer Toledo Corp., Toledo, Ohio, announces new chuck and drills especially designed to cut clean, round holes in gaskets, sheet plastic, cork and rubber, cardboard and paper on a common drill press. Chuck handles drills in 14 sizes from 1/8 to 1/2 in.

P5. Oil Heat Regulator

Continental Thermotrol, Inc., New Hyde Park, N. Y., has redesigned its Hoskinson Thermotrol to a one-piece unit. The Hoskinson Thermotrol is a heat exchanger which increases engine life by regulating the oil temperature. Connected to the oil header line and clamped to the exhaust pipe, the Thermotrol utilizes the exhaust heat to raise the temperature of the oil and to eliminate sludge.

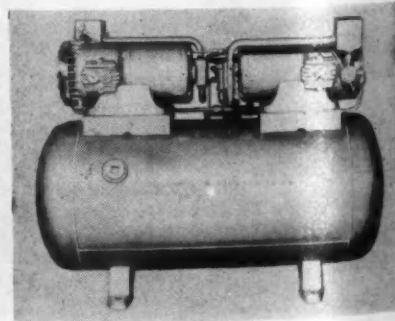


P6. Cooling System Tester

E. Edelman & Co., Chicago, announces a new testing device to determine radiator leaks and faulty pressure caps in pressurized cooling systems. Reversible chrome-plated adapter with 2-way rubber bushing fits directly into long or short neck radiator openings to test the new pressure radiator caps. Instrument is finished in aluminum to resist rust and corrosion. An easy-to-read indicator dial shows correct pressure zones for any pressure system, indicating "safe" or "danger."

P7. Air Compressor

Bell & Gossett Co., Morton Grove, Ill., announces a new motor-driven air compressor. It is a high capacity piston-type compressor, yet it produces an oil-free air discharge. By means of an exclusive design, no oil is needed for cylinder wall lubrication. The compressor is portable, too, with a convenient caddy cart available for all sizes. The compressor is also convertible into use as a vacuum pump. Secret behind the new oil-less feature is in the use of specially constructed graphite or carbon piston rings instead of steel rings.



P8. Multi

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P8. Multi-Purpose Grease

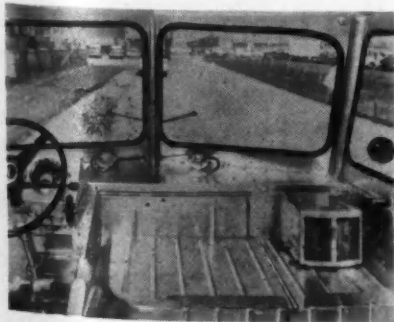
Valvoline Oil Co., Freedom, Pa., announces a new all-purpose grease. "X-All" is a non-melt type grease. Its texture permits easy delivery through pressure guns at extremely low temperatures. It is water repellent, resists emulsifying action of water, and has excellent adhesive and cohesive properties, with a melting point, leaving a protective lubricating film that stays put on bearing surfaces. In addition, it is resistant to wiping and rubbing action and is non-toxic.

P9. Anti-Corrosion Lacquer

Eastman Chemical Products, Inc., New York City, reports it has developed, together with Egyptian Lacquer Mfg. Co., a new butyrate lacquer coating designed to protect aluminum surfaces for long periods despite wind-borne grit, road salts and weather. It is a clear, water-white protective butyrate coating. Ideally, it should be sprayed on as the new truck-trailer comes off the production line. However, it also can be applied to equipment which has already seen service, and can be renewed as needed during the service life of the trailer. No priming coat is required on new aluminum, only a solvent wash to remove all traces of grease, wax or foreign matter. On weathered aluminum, a standard phosphoric acid pre-wash is recommended.

P10. Cab Defroster

Evans Products Co., Plymouth, Mich., announces a new cab defroster specially designed for defrosting windshields of package delivery trucks. It is individually controlled and operated. It is said to have adequate air volume and velocity sufficient to defrost windshield, side windows and even reach door windows on both sides. It can be installed inside or outside the dash. Nozzles are available for either one or two-piece windshields. Six or 12-volt models deliver 60 cfm, are rated at 3100 Btu.



P11. Truck Tire

Dayton Rubber Co., Dayton, Ohio, has developed a truck especially designed for superhighways. Because it uses a new tougher cord, the tire is said to be up to 30 per cent stronger than tires of a comparable size and to run cooler than conventional tires because it is lighter in weight. Increased carcass strength makes for a better recap.

P12. Radiator Hose

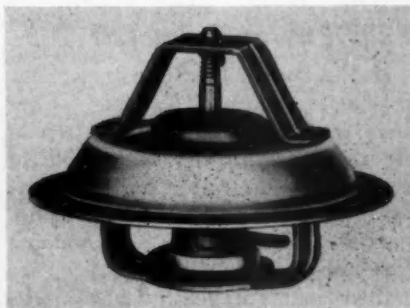
Thermoid Co., Trenton, N. J., now offers a "bulge" type radiator hose to prevent premature failure on short connections. This hose absorbs motor vibration in confined areas. Neoprene construction provides greater resistance to oil, grease and gas fumes. Two plies of special tire cord cloth assure more adequate reinforcement. It is available pre-cut to popular sizes.

P13. Regulator Tester

C. E. Niehoff & Co., Chicago, announces a new voltage regulator tester, the Model No. T-15. It is a portable instrument designed for complete testing of 6 and 12-volt systems. Large "picture window" ammeter and voltmeter have highly accurate easy-to-read scales including separate scale for each of three voltage ranges, selector dials for the voltage ranges and built-in resistance unit. Rear compartment holds illustrated troubleshooting manual and shielded leads.

P14. Thermostat

Standard-Thomson Corp., Dayton, Ohio, announces its new "HP" Thermostat, designed specifically for use in pressurized cooling systems. It is available in a complete range of numbers to fit all pressurized cooling systems. A distinguishing feature is the exclusive reverse-action poppet valve which according to its makers brings all the advantages of the tight-sealing, trouble free poppet valve to pressurized systems.



P15. Load Holder

Robert E. Holman, Jr., Ocala, Fla., announces a truck and trailer load holder. It is a system of bars that fit across the body into recesses in the body walls. The bars are spring-extruded and the recesses may be in plywood, steel, aluminum or other sufficiently strong siding and ceiling. When not in use, they are stored against the ceiling of the vehicle.

P16. Chassis Grease

Pure Oil Co., Chicago, announces its new "Purelube" heavy-duty chassis grease. This grease has been specially designed to stand up under rugged off-the-road operating conditions of logging, mining and heavy-duty construction and for taxi and truck fleets where high resistance to impact is required. It also has high resistance to water and won't wash out of chassis parts.

P17. Wheel Dolly

The Ken-Tool Mfg. Co., Akron, Ohio, announces an improved hydraulic lifting dolly, that makes it possible for one man to remove and replace single or dual truck wheels unassisted. Known as the "Ken E-Z," Improved Design No. T-105, it features pivoted roller spindles to make it easy for the operator to produce a rocking motion,

(TURN TO NEXT PAGE, PLEASE)



New Product Descriptions

Continued from Page 85

to line up the wheel hub with the axle. A rear booster bar vibrates to loosen bearings for removing wheels and also makes it easy to feed the brake drum into the shoe, when wheels are replaced.

P18. Truck Decal

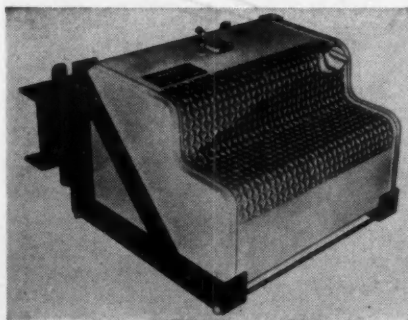
American Decalcomania Co., Chicago, announces its new water-applied truck decal, called "Type T-G" (tough grip). American says tests and actual usage show the "Type T-G" truck decal offers greater durability, weather resistance, and adhesion without the use of messy varnishes or cements in its application. A heavy-duty decal, the "Type T-G" can be applied to most any type of truck panel surface, finished or unfinished.

P19. Paint Remover

Creative Chemical Co., Hazel Park, Mich., announces a combination paint dissolver-remover. Called R. P. O. (Rinses Paint Off), it can be brushed, poured or sprayed on the surface from which paint is to be removed.

P20. Fuel Tanks

Master Tank & Welding, Dallas, Tex., is producing a new line of round and L-step fuel tanks. The round fuel tanks feature an exclusive offset weld development for greater safety and crash resistance which places the weld a full inch from the point where the head of the tank starts to curve. The round tanks are available singly or in pairs, and come in 35, 40, 45, 50, 60 and 65-gal capacities. The L-step tank is designed for truck owners who wish to shift the weight of the fuel tank towards the front axle of the truck. They are manufactured in 42 to 71-gal capacities, and are available singly or in pairs.

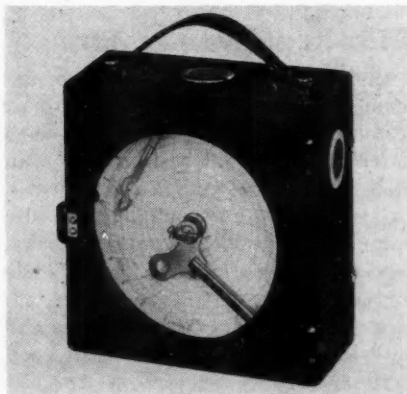


P21. Multi-Purpose Grease

Pure Oil Co., Chicago, announces a new multi-service replacing conventional single-purpose greases used for chassis parts, wheel bearings, universal joints and water pumps. Features of the new grease are: resistance to water, impact resistance, rust protection and high melting point. It can be pumped at low temperatures.

P22. Cold/Heat Recorder

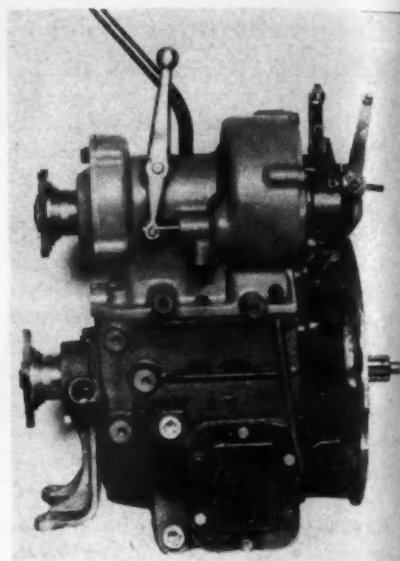
Weston Electrical Instrument Corp., Newark, N. J., is introducing an improved high sensitivity bimetal actuated miniature temperature recorder which permits easy, rapid range changing, and which will operate ac-



curately in any position. Known as Model No. 8465, this recorder is an entirely self-contained instrument. The pen operates directly off the sensing element without the usual multiplying levers, gives accurate records regardless of the position of the instrument. It is furnished for a wide range of operating temperatures, from -40 to +140 deg F. Range changes can be made simply by inserting the new chart, and, using a standard thermometer as reference, adjusting the range changing screw with ordinary screwdriver.

P23. Power Take Off

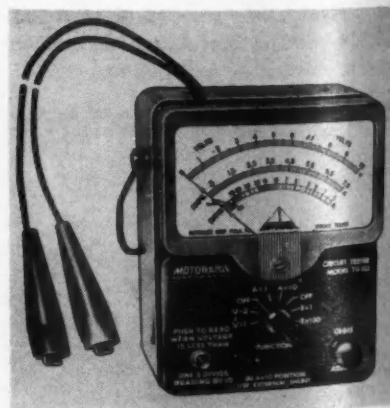
Mobile Power, Inc., Lansing, Mich., announces its new "Tangen" power drive that mounts directly on top of the transmission and is capable of transmitting the full power of the vehicle's engine to any piece of equipment such as air-compressors, welding generators, earth drills, pumps for fire engines and sprayers, winches, etc.



The power drive picks up the engine power directly from the main drive gear and does not interfere in any way with the regular operation of the transmission, nor is any structural change necessary in the chassis. Models are now available for the helical gear, 4-speed transmissions of Ford, Dodge and the Warner T-98. Spur gear models are being produced for the Dodge Power Wagon, the International 4 x 4 models and all trucks using the Warner T-9 and T-9A. It provides positive direct drive at any time required.

P24. Ignition Testers

Motoraide Corp., Philadelphia, is producing three new automotive ignition testers; a dwell-tach meter, a regulator tester and a circuit tester. Features of the instruments are extra-large D'Arsonval meters with spread, "flat" scales for easy, accurate reading; light weight; wear-resistant bakelite case; color-coded leads, non-slip rubber bumpers, and multi-use handle and stand. All instruments are designed for use on 6 or 12-volt systems. A complete manual of instructions accompanies each instrument.

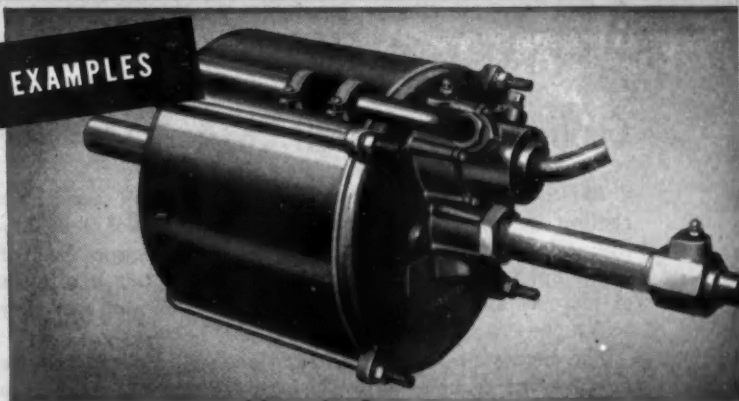


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TYPICAL EXAMPLES



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Vehicle Use Statistical Report

How big is the automotive industry? This complete, 80-page booklet tells the story in a wealth of facts, figures and charts. For truck and bus fleet men it gives the answer on registrations, productions, annual mileage, types in use, taxes, etc. In many cases, the data goes back 20 years or more.

It is the 1955 version—the 35th edition—of Automobile Manufacturer Assn.'s "Automobile Facts and Figures." It shows, for example, that trucks totalled 106½ billion vehicle miles in 1954, more than double the 1945 figure of 46 billion. Bus vehicle miles in 1954 were 4½ billion as compared to 3.8 billion in 1945. Special truck taxes show a greater increase. For 1954, the report shows trucks paid \$1771 million in special taxes compared to \$625 million in 1945.

You'll also find a 15-page section devoted to a complete factual story on the nation's highway. For a free copy, circle L 1 on the postcard on page 84.

Cooling System Wall Chart

This large-size cooling system wall chart will speed your cooling system maintenance. Produced by National Carbon Co., it includes a big diagrammatic, cross-section view of the complete engine cooling system. Around this is a series of pictures showing cooling system troubles and how they occur.

The clearly understood illustrations will make it easy to (1) prevent trouble before it happens and (2) spot the source of the trouble for quick correction. For your free copy of this chart, circle L 2 on the postcard.

Brake Booklet for Drivers

Fleet safety men will be interested in this pocket-size booklet, "Stop Smoothly—Safely" just published by Raybestos Division, Raybestos-Manhattan. It describes easily understood words and pictures how to get the most and safest mileage out of hydraulic brakes.

It includes driver tips on normal operation, slippery roads, sharp curves, downhill operation and total brake

failure. It also tells the driver what to look for to make sure his brakes are operating safely. For a free copy, circle L 3 on the postcard on page 84.

Trucking Industry Growth Data

Just off the presses is this 1955 edition of "Truck Trends" published by American Trucking Assns. It includes a yearly chart on fleet operating ratios, reports that Class I intercity carriers moved an average load 9.01 tons an average of 242 miles in 1953 with an average gross revenue of 5.7¢ per intercity ton-mile. In addition, data is included to show maintenance costs, revenue, operating taxes paid and other similar cost figures. You can get a free copy by circling L 4 on the postcard on page 84.

Transmission Service Manual

This is the first in a series of illustrated service manuals covering the full line of transmissions made by Fuller Mfg. Co. It provides complete service information including disassembly and reassembly instructions on the Fuller Model Nos. 5-A-33, 5-A-330, 5-B-33 and 5-B-330 transmissions.

Instructions are given in easy-to-follow step-by-step procedure. They are prefaced with a list of precautionary work measures to insure the best job and include several self-explanatory illustrations. Users of the above numbered transmissions can get a free copy by circling L 5 on the postcard on page 84.

Driver Training Guide

White Motor Co. has just announced this complete revision of its "Driver Selection and Training Manual." It is designed to assist operators in developing driver hiring and education programs tailored to their own fleet operations.

Suggested personnel application and testing forms are reviewed and driver training procedures are analyzed from a viewpoint of cutting driver turn-over. Copies are available at 50¢ each (it's worth quite a bit more), from The White Motor Co., Cleveland 1, Ohio.

(TURN TO PAGE 162, PLEASE)

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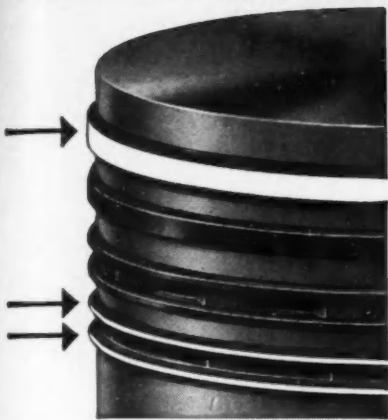


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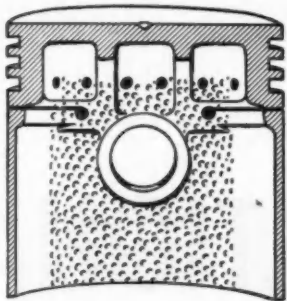
RINGS

Fast Break-in

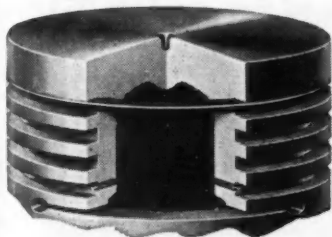
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The International Line

Line	Series	GVW/GCW Range (lb)
S	S-100—S-180	4,200—33,000
R	R-185—RDF-230-H	up to 60,000
West Coast	CO-180—CO-225	up to 65,000
	400	up to 90,000

V A NEW LINE of International trucks has been announced by the motor truck division of International Harvester Co. Designated the S-line, the new models include a wide and complete range of 4 and 6-wheel gasoline and LP gas-powered trucks ranging in GVW rating from 4200 to 33,000 lb.

The heavy-duty R-line from the Model R-185 "Roadliner" up through the huge diesel-powered six-wheel model RDF-230-H, including gasoline, diesel, and LP gas-powered 4 and 6-wheel and off-highway truck and tractor models with GCW ratings up to 60,000 lb, continues as part of the overall International line. Rounding out the International line are 4 and 6-wheel COE models and the 400 series. The heavy-duty 400 series comprises gasoline, diesel, or LP gas-powered models ranging up to GCW rating of 90,000 lb.

S-Line Summary

The new S-line models range from the light-duty S-100 series through the heavy-duty S-180 series. The line includes a wide range of pickup, panel, stake, and multi-stop delivery models with factory-mounted, added-capacity bodies; farm trucks, "Roadliner" truck-tractors, and other conventional chassis models for medium



An optional feature of the new S-Line is International's "Comfo-Vision" cab



Pick-up, panel or special body, the S-112 comes in 115 and 127-in. wheelbases, uses the 131-hp BD 240 engine

NEW INTERNATIONAL

R-Line and 400 series are retained for models R-185 and

and heavy-duty hauling requirements in general or specialized fields; five cab-forward models; fire truck, school bus, and four and six-wheel "Loadstar" dump-truck chassis; and three four-wheel-drive models.

Twenty-three of the S-line conventional four-wheel models, three six-wheelers, six cab-forward models, and the S-160 (4 x 4) are available with LP gas engines.

Price Increases

Chassis prices for the new light-duty S-100 through the heavy-duty

S-180 truck models range from \$65 to \$150 higher than previous models. The price of one new heavy-duty, 6-wheel truck was increased \$240. The company pointed out that in many instances the new models have larger engines and a number of new functional and styling features as standard equipment which were available only as optional equipment at a higher price in previous models.

The S-line models are functionally styled with clean, distinctive lines. The driver-designed, all-steel cab combines safety construction



One of six models in the S-160 series, this 29,000-lb GCW, S-165 tractor is powered by BD 264, 140-hp engine

S-LINE Includes

Models up to 33,000 lb GVW

up to round out a full line of trucks that includes a new 9000-lb GVW Metro delivery

with all-around visibility, controlled ventilation, comfort-angled instruments, and minimum-effort shifting, steering, and braking controls.

A new, optional de luxe cab, available on all conventional 4-wheel models up to and including the S-170 series, provides added refinements and features including special two-tone interior trim colors; perforated, sound-insulated roof trim panel; nylon covering with matching vinyl-coated fabric over thick foam-rubber seat and back cushion; and color-matched steering wheel and dual sun visors. Fiber

glass heat and sound insulation, de luxe arm rests, and cylinder door locks are other features.

New Metro Model

In addition to the more standard models, nine International truck chassis with Metro or Metroette bodies are offered in the multi-stop delivery field. These include a wide range of wheelbases and payload capacities with standard all-steel Metro bodies, specialized Metroette bodies, Metro Van bodies, Metro walk-in cabs, and lightweight Metro-lite bodies made of magnesium

alloy, aluminum alloy and fiber glass reinforced plastic. A new Metro model, the SM-130, rated at 9000 lb GVW, is being introduced at another unit in this line.

The lightweight Metro-lite body, made of magnesium alloy, aluminum alloy, and fiber glass reinforced plastic, is offered on all nine SM-120, SM-150, and SM-160 series chassis. These models range in GVW ratings from 5400 to 16,000 lb and are available in 115, 122, and 137 3/4-in. wheelbases. The Metro-Lite body is available in lengths of 9 ft 6 in., 10 ft 6 in., and 12 ft 7 in.

Trailmobile Reaches for Optimum Cube

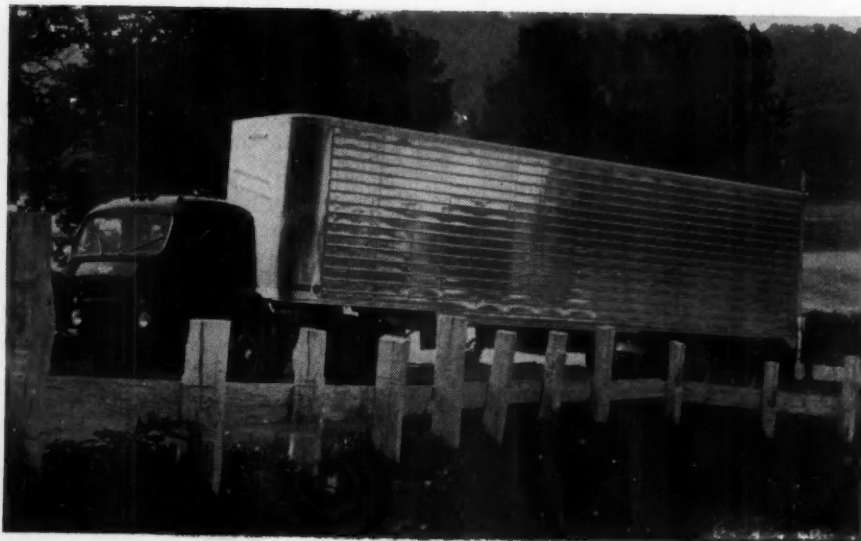
Engineers consider cube, weight, strength and streamlining, decide on a 35-ft, 2227-cu ft, 10,100-lb aluminum trailer that offers a 50,000-lb load capacity

THIS MONTH, Trailmobile, Inc. adds a new model to its line to be known as the "Optimum Cube" trailer. It features a 1-in. thick side wall using special extruded aluminum posts in which the plywood liner is recessed.

It should be noted that this external design showed a 6 per cent reduction in horsepower requirements as demonstrated in Trail-

mobile's wind tunnel tests last spring (CCJ, April, page 80).

At a special press preview in Cincinnati, Trailmobile engineers explained the meaning and scope of the word "optimum," pointed out that it represented the proper balance of four factors—cube, weight, strength and streamlining—to achieve highest possible cube for general freight handling.



Steps to Optimum Cube

1. Extruded post, 2-in. side wall

Stiffness	7520
Strength	6400
Weight (2 sides) (lb)	541
Cube (cu ft)	2000

2. Extruded post, 1-in. side wall

Stiffness	4540
Strength	8720
Weight (2 sides) (lb)	779
Cube (cu ft)	2227

3. Solid post, 7/8-in. side wall

Stiffness	4180
Strength	8600
Weight (2 sides) (lb)	1283
Cube (cu ft)	2233

4. Solid aluminum sheet, 1/2-in. wall

Stiffness	1440
Strength	8720
Weight (2 sides) (lb)	2405
Cube (cu ft)	2245

Basic specifications may be summarized as follows:

Cubic capacity: 2227 cu ft.

Weight: 10,000 lb for a 35-ft van with shift-able tandem, 6-in. drop, 10:00 x 20 tires.

Load capacity: 50,000 lb.

Design: Extruded aluminum posts between horizontally corrugated aluminum outer panels and plywood liner, 18-in. corner radius and 6-in. roof radius.

Engineers at Work

Eliminating the deep 24-in. drop trailer used in household goods moving as impractical for general freight commodities, the engineers settled on maximum length, desirable floor height and maximum practical roof height, then they went to work on side wall thickness. Results of research studies are summarized in the box above. Assuming the same overall outside dimensions in each case, they started with a conventional design using 2-in. walls, came up with the laboratory findings cited in the first example.

Reducing the side walls to 1 in. resulted in an increase of approximately 227 cu ft with little loss in (TURN TO PAGE 124, PLEASE)

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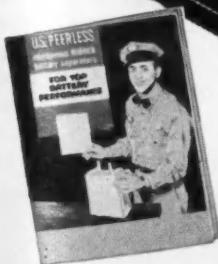
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Write to address below for free copy of informative booklet on the high-performance, low-upkeep U.S. Peerless Rubber Battery Separators.

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by battery acid, heat or plate pressures—will not get mushy or soft in service. High mechanical strength prevents cutting by warped plates or loose plate material. Peerless even *outlasts* the plates. It assures more economical operating costs. In cold weather, it gives 20% faster cranking speed, 10% more power. *Protect your battery investment* by making sure your batteries have Peerless Rubber Separators.

UNITED STATES RUBBER COMPANY

Electrical Wire and Cable Department • Rockefeller Center, New York 20, N. Y.



COMMERCIAL CAR JOURNAL, October, 1955

Ford Ups Horsepower in

Standard safety features include energy-absorbing steering



Ford offers an optional "power package" on three engines including special air intake, dual exhausts, four-barrel carburetion to increase V-8 horsepower

The 200 truck models in Ford's 1956 line of trucks feature tubeless tires, higher horsepower engines, 12-volt ignition systems, safety steering wheels and safety door latches. Two new models have been added—A T-750 tandem axle model in the heavy truck series, and a new, longer wheelbase pickup. Gross vehicle weights extend from 5000 lb on the pickup to 42,000 lb on the heavy duty tandem axle models.

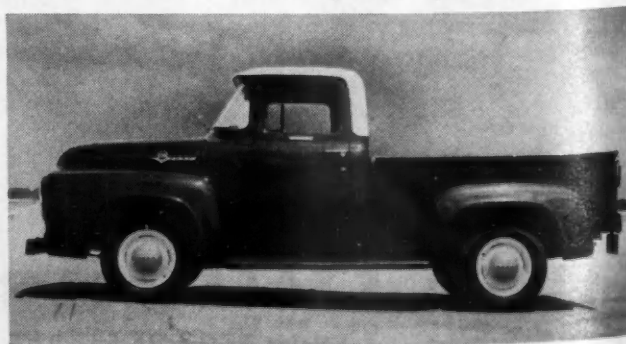
Increased Horsepower

Eight distinct engine models offer an average of 17.3 per cent more power in the 1956 Ford truck line than last year. The compact short stroke engines have improved "breathing," due to the redesign of valving and manifold- ing.



Safety steering wheel with rim three inches above horn button spreads impact over driver's body if he is thrown forward, protects him from striking the steering column

New Fords have wraparound windshields, a roof extension to cut sun glare. A wraparound rear window is optional. Tubeless tires and 12-volt ignition system are standard



wheel and

Ford's 272 with a comp rated at 167 powerful ei available in

Biggest tr cu in. heavy pression rati at 200 hp w special opti consisting c retion, dual cial fresh a temperature air intake th the hood for power packa 302-cu in. en

In medium 272-cu in. Y with a comp rated at 168 carburetion

Engine
Cost Cutter Six
Power King Y-8
Heavy Duty Power King Y-8
Heavy Duty Power King Special Y-8*
Cargo King Y-8
Cargo King Special Y-8*
Torque King Y-8
Torque King Special Y-8*

* Equipped with

COMMERCIAL C

in '56 Models

wheel and safety door locks on all models

Ford's 272-cu in. Y-8 engine, with a compression ratio of 7.8-1, rated at 167 hp is one of the most powerful eight-cylinder engines available in the pickup class.

Biggest truck engine, the 332-cu in. heavy duty Y-8, has a compression ratio of 7.5-1 and is rated at 200 hp when equipped with a special optional power package consisting of four-barrel carburetion, dual exhausts, and a special fresh air intake. A manual temperature control regulates cold air intake through an airscoop on the hood for this model. The same power package is available on the 302-cu in. engine, rated at 190 hp.

In medium trucks, Ford has a 272-cu in. Y-8 heavy duty engine with a compression ratio of 7.6-1, rated at 168 hp, with four-barrel carburetion at governed speed.

New features incorporated in Ford's heavy duty engines include: sodium cooled exhaust valves which allow the valve head to run approximately 225 deg cooler than solid stem valves, concave, dish-type intake valve heads provide better sealing to prevent fuel and compression losses, special steel alloy exhaust valve seat inserts have been developed to increase resistance to corrosion and wear.

Another option is a thermostatic fan which adds power to heavy trucks by disengaging the engine fan at low operating temperatures. This is said to provide up to 18 more usable horsepower at the clutch.

The new T-750 truck, together with the established T-700 and
(TURN TO PAGE 134, PLEASE)

Engine Specifications

Engine	Displacement	Bore	Stroke	Compression Ratio	Horsepower	Torque
Cool Cutter Six	223	3.62	3.60	7.8	133 @ 4000	202 @ 16-2600
Power King Y-8	272	3.68	3.30	7.8	167 @ 4400	260 @ 21-2600
Heavy Duty Power King Y-8	272	3.68	3.30	7.6	158 @ 3800**	247 @ 20-2600
Heavy Duty Power King Special Y-8*	272	3.68	3.30	7.6	168 @ 3800**	259 @ 21-2900
Cargo King Y-8	302	3.62	3.66	7.5	175 @ 3800**	279 @ 20-2600
Cargo King Special Y-8*	302	3.62	3.66	7.5	186 @ 3800**	286 @ 21-2700
Torque King Y-8	332	3.80	3.66	7.5	190 @ 3800**	306 @ 20-2600
Torque King Special Y-8*	332	3.80	3.66	7.5	200 @ 3800**	316 @ 21-2700

* Equipped with a four barrel carburetor.

** Governed engine speed.

The 1956 Ford Line

Courier Available with 176-hp Y-8 engine with Fordomatic, 173-hp Y-8 with overdrive or conventional transmission, 137-hp I-6 with Fordomatic, overdrive or conventional.

Conventional Line

F-100 5000 lb GVW. 110-in. wheelbase. 45-cu ft box. Also an 118-in. wheelbase with an 8-ft express and 65.4-cu ft box.
F-250 7400 lb GVW. 7 1/2-ft stake. Also an 118-in. wheelbase with an 8-ft express and 65.4-cu ft body.
F-350 9800 lb GVW. 74-cu ft express. Also an 130-in. wheelbase with a 9-ft stake.
F-500 15,000 lb GVW. 130 and 154-in. wheelbases. 7 1/2 to 13-ft bodies.
F-600 18,000 lb GVW. 130, 154 and 172-in. wheelbases. 9 to 12-ft bodies.
F-700 21,000 lb GVW. 132, 144, 156, 175 and 192-in. wheelbases. 7 1/2 to 19-ft bodies.
F-750 21,000 lb GVW. 132, 144, 156, 175 and 192-in. wheelbases. 7 1/2 to 19-ft bodies. Power steering available.
F-800 24,000 lb GVW. 132, 144, 156, 175 and 192-in. wheelbases. 7 1/2 to 19-ft bodies.
F-900 29,000 lb GVW. 132, 144, 156, 175 and 192-in. wheelbases. 7 1/2 to 19-ft bodies.

Cab Forward Line

C-500 15,000 lb GVW. 110, 134 and 158-in. wheelbases. 7 1/2 to 17-ft bodies.
C-600 18,000 lb GVW. 110, 134 and 158-in. wheelbases. 7 1/2 to 17-ft bodies.
C-700 21,000 lb GVW. 116, 132 and 156-in. wheelbases. 8 to 16 1/2-ft bodies.
C-750 21,000 lb GVW. 116, 132 and 156-in. wheelbases. 8 to 16 1/2-ft bodies. Power steering available.
C-800 24,000 lb GVW. 116, 132 and 156-in. wheelbases. 8 to 16 1/2-ft bodies.
C-900 29,000 lb GVW. 116, 132 and 156-in. wheelbases. 8 to 16 1/2-ft bodies.

Tandem Axle Line

T-700 28,000 lb GVW. 144, 156, 175 and 192-in. wheelbases. 10 to 19-ft bodies. Power steering standard with Cargo King Y-8 engine.
T-750 36,000 lb GVW. 144, 156, 175 and 192-in. wheelbases. 10 to 19-ft bodies. Power steering standard.
T-800 42,000 lb GVW. 144, 156, 175 and 192-in. wheelbases. 10 to 19-ft bodies. Power steering standard.

Parcel Delivery Line

P-350 8000 lb GVW. 104 and 122-in. wheelbase. Fordomatic available.
P-500 15,000 lb GVW. 130-in. wheelbase. Fordomatic available.

School Bus Line

B-500 13,000 lb GVW. 154-in. wheelbase. 36-passenger body.
B-600 18,000 lb. GVW. 192-in. wheelbase with 48-passenger body.
B-700 21,000 lb GVW. 245-in. wheelbase. 66-passenger body.
B-750 21,000 lb GVW. 245-in. wheelbase. 66-passenger body.

Reyco's Tandem Suspension

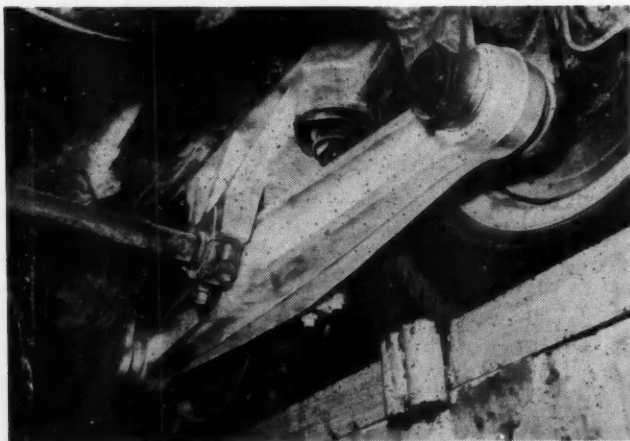
THE NEW "Reyco 21" Challenger Series tandem suspension which features non-lubricated "Reyco-Lastic" bearings and self-aligning rubber bushings has been announced by Reynolds Mfg. Co., Springfield, Mo.

Under carefully conducted test operation during the past three years, Reyco engineers have developed the new "Reyco-Lastic" non-lubricated rubber bearing. An added feature is that the bearing may be restored to new condition after thousands of miles of operation by easy readjustment of the bearing compression.

The new "Reyco 21" Challenger tandems also feature self-aligning rubber bushings at all connecting points to prevent metal to metal contact of the torque arms with other tandem parts, thus preventing wear of these parts and preventing damage due to strain and road shock exerted through misaligned parts.

Increased spring area provides a softer ride with the new "Reyco 21" Challenger Tandem and the tandem has been engineered to provide the lightest weight possible consistent with high quality standards. Net weights of the new "21" Challenger tandem varies from 792 to 835 lb, depending upon the model selected. For further data on this new suspension circle P-40 on the postcard on page 84.

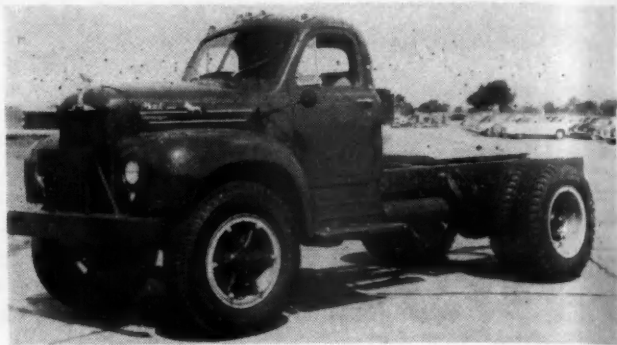
Hendrickson's Equalizer Beam



USE OF a forged aluminum equalizer beam allows a weight savings of 120 lb of unsprung weight in a complete Hendrickson heavy-duty tandem. The aluminum beam forging was designed and tested by Aluminum Co. of America's Development Division, Cleveland, Ohio, in cooperation with the Hendrickson Mfg. Co., Lyons, Ill.

The equalizer beam assures equal division of the truck load under all conditions. This is accomplished by causing all four wheels (eight tires) to be in contact with the road surface even if one wheel rides over a bump or falls into a hole. The beam thereby cuts road shocks in half, greatly reducing their damaging effect on chassis and load.

An increase in section depth was made on the aluminum part, but it was possible to produce a 50 per cent weight saving with the light metal.



Mack's Heavy Dumper Models

FOR HEAVY dumper work—up to 8 yd struck capacity—Mack has introduced two new models. No. B-60X, gasoline-powered and No. B-61X, diesel-powered. Rated at 46,000 lb GVW, they are offered with a 158½-in. wheelbase, adapted to 10 or 11-ft dump bodies. Standard tires are 11.00 x 24, 14-ply, single front and dual rear, on 8.5 rims, mounted on steel-spoked wheels.

For the gasoline-powered model, Mack's Thermodyne EN-464A engine, of 185 hp, is supplied. The diesel-powered model uses the Mack Thermodyne diesel, END-673, of 170 hp. Standard transmission is a five-speed, direct-in-fifth with the option of a Duplex, wide-range nine-speed overgeared transmission.

Rear axles are dual reduction units, equipped with radius rods and torque arms. Service brakes are air-actuated, with a total area of 710 sq in., rear drums being 17¼ x 6 in. The hand brake is of the internal-expanding type, located on the transmission tailshaft with 139 sq in. of area.

Frames are of pressed, chrome manganese steel, heat-treated, in double channel form, 10½ in. deep, with 3¼-in. flange, both inside and outside rails ¼ in. thick. They are braced with channel cross-members with wrap-around, broadly-spread gussets.

Football Queen Helps Build Road

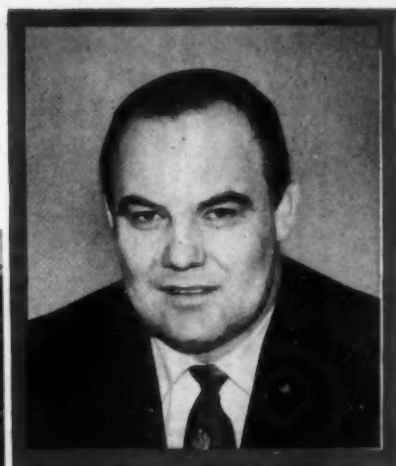


In a display of high-speed street paving, highlighting the recent dedication of the new executive offices and laboratories of The Asphalt Institute on the University of Maryland campus at College Park Md., a 28-man team of the Corson & Gruman Co., Washington, D. C., resurfaced 1100 sq yd of road in 24:35 minutes. Maryland sophomore, Miss Leoma Naughton, the National Football Queen and former national Press Photographer Queen, fired the starting gun which set the tandem spreaders and rollers in motion down a 393-ft stretch of road. A fleet of 14 trucks, loaded with hot asphalt mix, fed the moving spreaders.

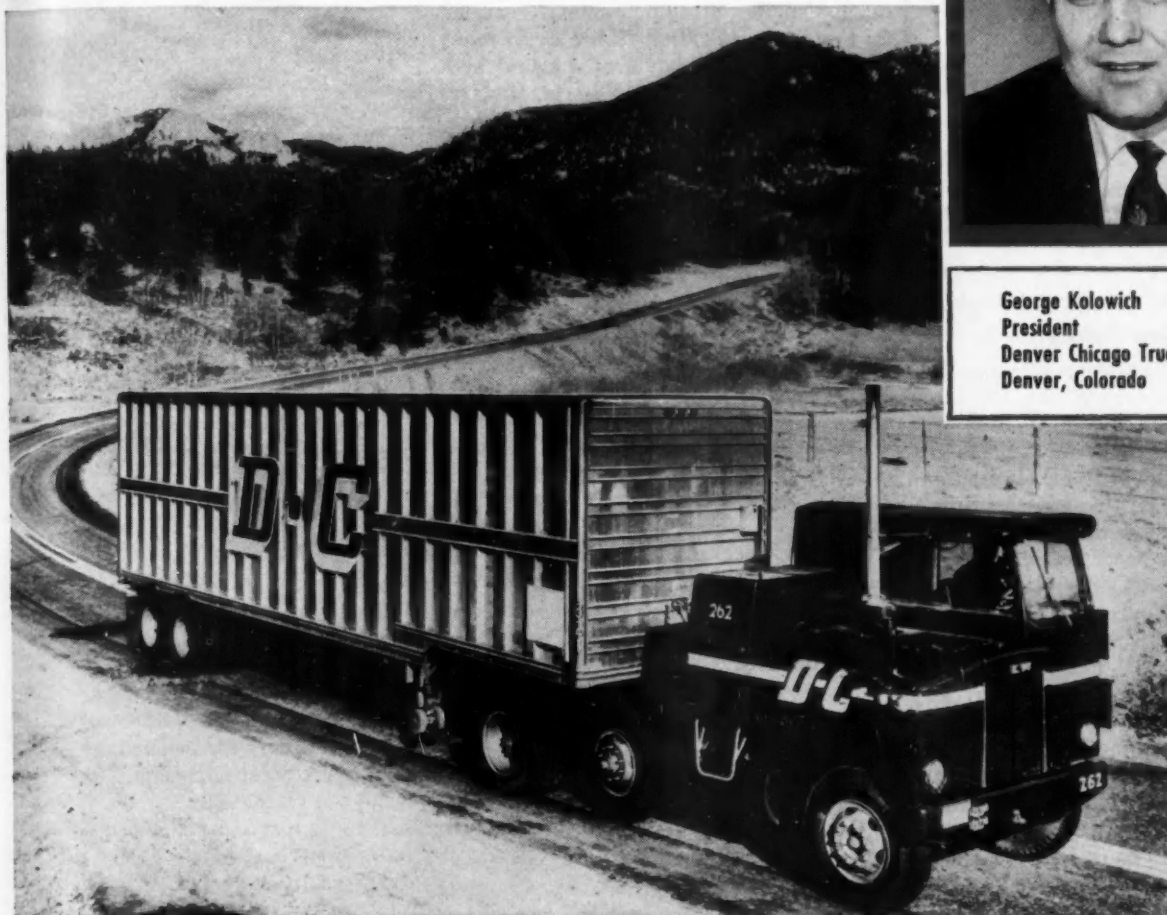
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PHI
COMMERCIAL

"DC Has Complete Confidence in PHILLIPS 66 HDS MOTOR OIL"



George Kolowich
President
Denver Chicago Trucking Co., Inc.
Denver, Colorado



George Kolowich became president of DC in 1953. DC has steadily increased its business since he took over. Another sign of success is the new \$1,000,000 terminal near completion in North East Denver.

DC, the only coast-to-coast carrier, operates some 3½ million miles a month hauling general commodities. In their truck line-up, you'll find Kenworths, Macks, Whites and Internationals. Many of these tractors use Phillips 66 Diesel Fuel and are protected by Phillips 66 HDS Motor Oil.

George Kolowich says this about Phillips 66

Products and service: "This will give you an idea of how we feel about your products. In January '55 we put a million dollars worth of new equipment into service on the Chicago-Denver segment of our coast-to-coast sleeper cab operation. We're using Phillips 66 HDS Motor Oil in this equipment exclusively. As you can see, we have complete confidence in Phillips 66 HDS Motor Oil."

Take a tip from DC. Find out what Phillips 66 has to offer. No matter what kind of fleet you operate, you'll find there's a Phillips 66 heavy duty motor oil to suit your needs. Write for information.

A Phillips 66 Lubrication Engineer will be glad to help you select the correct Phillips 66 heavy duty motor oil for your particular service conditions. Write to: Sales Department, Phillips Petroleum Company, Bartlesville, Oklahoma.



It's Performance That Counts!

PHILLIPS 66 HEAVY DUTY MOTOR OILS

COMMERCIAL CAR JOURNAL, October, 1955

October News Roundup

Transportation Policy

Three Administration officials—Secretary of Commerce Weeks, Secretary of Defense Charles E. Wilson and Director of the Office of Defense Mobilization Arthur S. Flemming—urged a House subcommittee late last month to adopt the recommendations of the Presidential Advisory Committee on Transport Policy. Secretary Weeks presented a comprehensive statement to the subcommittee, headed by Rep. Oren Harris (D., Ark.), explaining the recommendations of the Advisory Committee. He emphasized that the "report is not aimed at giving one form of transportation an unfair advantage over any other. Instead it paves the way for all modes of transportation to give more effective service to the public. In a nutshell, it is aimed at providing greater national security and better and less expensive transportation for the American people." The Secretary said the ICC could "do a more effective job" if its regulations were relaxed.

Dept. of Defense

Secretary Wilson, in urging adoption of the report, stated: "It is the purpose and objective of the recommendations of this report to strengthen private ownership so that our common carrier transportation system will continue to expand and function efficiently." Flemming testified that the "Committee believes it is of the greatest importance to preserve and strengthen our common carrier system for the benefit of the public, both in peace and in times when the needs of defense will place a very heavy load on our transportation systems. . . . We also believe that it is necessary to develop that system under a policy which will permit each type of transportation to sell its own particular characteristics and advantages to the public."

ATA's Testimony

James F. Pinkney, General Counsel, American Trucking Assns., challenged the assertion of the report "that our regulation is obsolete." He stated that "no one can dispute the fact that the maintenance of a progressive and financially strong common carrier system is essential. There is no more progressive or financially sound system to be found in the world. In fact, it is by far the best transportation system in the world."

Pinkney concluded that the recommendations of the report "as to competitive rate making, the suspension powers, the long-and-short haul prohibitions and volume freight rates all would give the railroads competitive weapons not possessed by other modes of carriage. Their application would not only have devastating effects on the railroads' competitors but also would subject some users of railroad service to discriminatory treatment and increased freight rates. This would be especially true of shippers of agricultural, forestry and mine products and of small shippers and small communities.

Automatic Rates

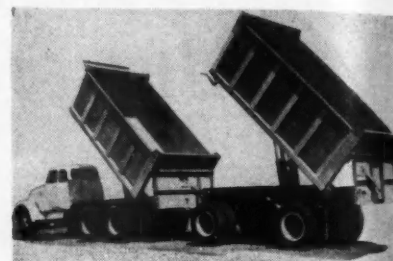
"We believe it to be a fair criticism of the report to say that it undertakes to provide automatic approval of competitive rate adjustments which properly should be approved only by an impartial body exercising sound judgment and reasonable discretion in the public interest."

Pinkney further pointed out that many of the transportation problems complained of "result from ineffective administration and enforcement of your present policy and laws," and that "many of the problems can be cured in substantial part by a properly staffed and adequately financed ICC."

Railroads' View

J. Carter Fort, Vice President and General Counsel of the Assn. of Amer-

Galion Dump Trailer



A new two axle, four dual wheel trailer dump, designed for towing behind heavy-duty dump trucks, is announced by Galion Allsteel Body Co., Galion, Ohio. Known as the Model HH Hitchhiker, the new unit is designed for materials hauling use in localities where weight laws require wide axle spacing for hauling maximum payloads. Model HH is offered in body lengths of 15 or 16 ft, with payload capacities of 10 to 20 cu yd, has a Model No. 77142 Duo-ram hoist of up to 18-ton capacity. The dolly type front axle is fitted with conventional dual wheels.

ican Railroads, accused the trucking industry of resisting federal rate regulation changes because it wants business it is not economically qualified to handle. He declared that the recommendations of the Presidential Committee's report for removal of "existing restraints on competitive rates would pave the way for the most efficient and most economical possible development and use of our national transportation system as a whole."

Dave Beck's View

In a statement submitted to the Subcommittee, Dave Beck, President of the International Brotherhood of Teamsters, AFL, opposed the report and warned that its proposals would undermine the ICC and "might inevitably lead to nationalization" of our transport system because of "inherent and potential abuses" which would be created under a monopolistic railroad system.

Training Program

A new training program will be launched this fall by Sun Electric Corp. The midwest manufacturer has revised its long established service training program to offer a modernized series of courses. The new training courses will cover a four-week period with each week offering a separate, complete unit of study. Enrollees can sign up for all or any combination of units which begin on the first Monday and each subsequent Monday of

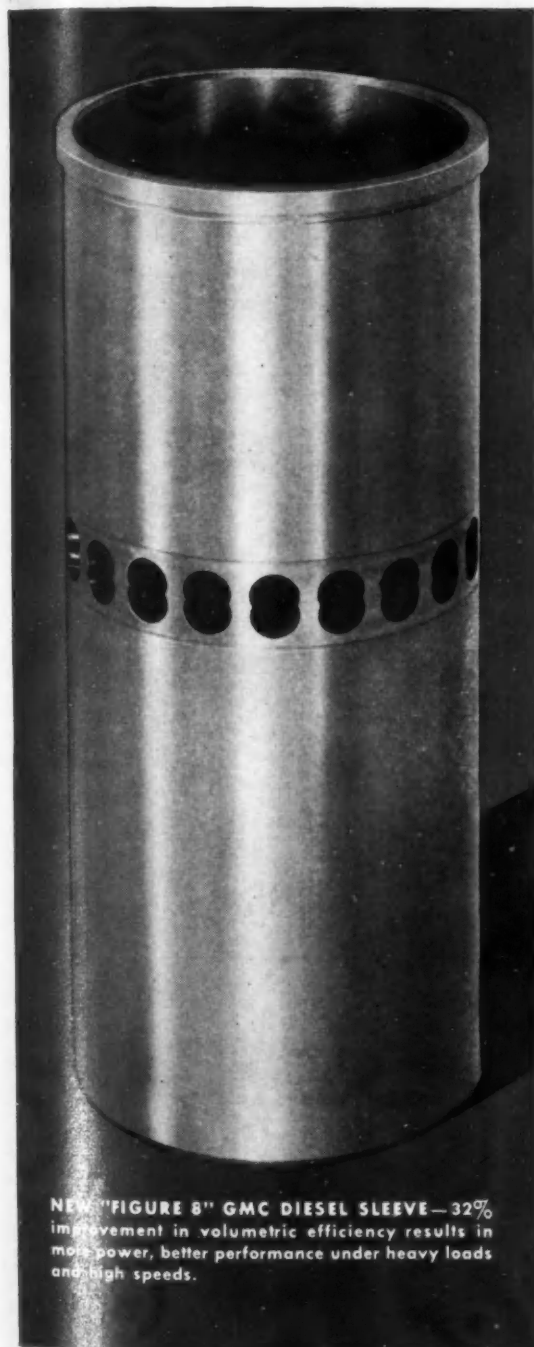
(TURN TO PAGE 176, PLEASE)

FWD has cancelled production of the following truck models shown in the truck specifications in this issue:

Page 110, models shown on line numbers 31, 33, 35, 38, 39, 45, 46, 47 48 53, 54 and 58.

Page 114, models shown on line numbers 8, 11 and 15.

INSTALL TOLEDO STEEL HEAVY-DUTY PARTS TO INCREASE POWER, LOWER COSTS, CUT "DOWN-TIME"



NEW "FIGURE 8" GMC DIESEL SLEEVE—32% improvement in volumetric efficiency results in more power, better performance under heavy loads and high speeds.

● Toledo Steel's complete sleeve line now includes an improved design sleeve for GMC 71 diesel engines, with 32% more air inlet area, plus a modified piston design to increase the compression ratio. The result is *more power*, and greatly improved "breathing", or scavenging, for better high speed, heavy duty operation.

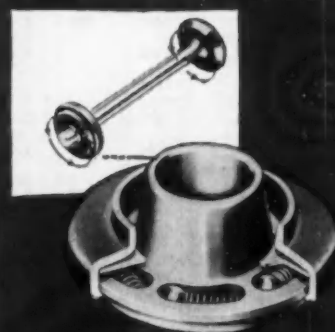
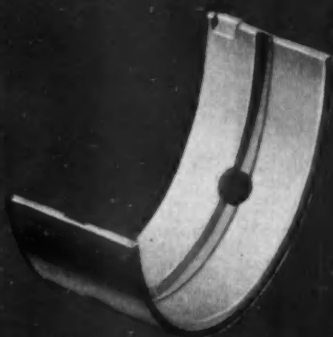
Assure yourself of maximum operating efficiency and lower costs per mile by using Toledo's complete line of wet and dry sleeves and sleeve assemblies for all types of vehicles.

Toledo Steel also offers the only positive type valve rotator, the *Rotocap*. Thousands of fleet operators have proved that *Rotocap* increases valve life from two to five times, cutting repair costs and down-time. And it isn't at all unusual for truck and bus operators to find Toledo Steel CL-77 bearings still usable after 200 to 250 thousand miles of service.

All Toledo Steel motor and chassis parts are built to meet or exceed original equipment specifications. Ask your Toledo Steel jobber to explain how these and other heavy-duty Toledo Steel parts can mean savings for you.

*For Complete Line Parts and Service
see your TOLEDO STEEL JOBBER*

CL-77 BEARING—higher fatigue resistance and better surface action delivers up to 250,000 miles of service.



ROTOCAP—positive type valve rotator increases valve life 2 to 5 times.



TOLEDO STEEL PRODUCTS

6402 CEDAR AVENUE • CLEVELAND 3, OHIO

Division of Thompson Products, Inc.

1955 New Truck Registrations by Makes by States*

STATE AND MONTH	Brockway	Chevrolet	Diamond T	Dodge	Ford	G.M.C.	International	Mack	Reo	Studebaker	White	Willis Jeep	Willis Truck	All Others	Total
Alabama	July	591	3	96	481	169	118	23	2	7	18	4	8		1,518
Arizona	7 Mos.	3,908	15	686	3,430	990	950	106	15	57	118	36	46	21	10,378
Arkansas	July	249		56	168	103	38	3	1	12		8	16	1	655
California	7 Mos.	1,500	5	409	1,175	461	336	17	7	78	22	69	142	30	4,251
Colorado	July	1,046	9	148	940	311	268	20	2	44	20	3			2,812
Connecticut	7 Mos.	3,259	18	514	3,431	854	842	33	8	135	50	37	21	2	9,204
Delaware	July	2,741	28	730	2,170	681	473	40	15	91	59	121	173	301	7,823
District of Columbia	7 Mos.	15,686	184	4,199	15,252	4,564	3,371	226	101	711	463	803	1,196	1,005	47,770
Florida	July	438		87	302	106	112	4	8	20	22	55	55	17	1,226
Georgia	7 Mos.	2,214	13	522	1,980	602	692	67	33	106	68	295	428	111	7,141
Idaho	July	213	5	55	154	45	56	21	3	11	36	17	19	14	850
Illinois	7 Mos.	1,319	47	362	1,128	310	551	146	26	99	146	69	120	73	4,370
Indiana	July	71		19	60	39	42	14	1	2	32	2			282
Iowa	7 Mos.	515	1	145	352	165	280	177	3	10	178	10	11	8	1,889
Kansas	July	105		14	55	36	25	1	1	2	3	1	2	2	246
Kentucky	7 Mos.	408	1	110	400	206	144	6	17	2	15	4	17	19	1,352
Louisiana	July	816	4	105	701	187	125	36	12	23	34	43	55	20	2,161
Maine	7 Mos.	4,923	33	955	5,146	1,176	1,179	285	73	229	308	226	385	134	15,052
Maryland	July	730		84	717	168	152	18	2	18	51	3			1,956
Massachusetts	7 Mos.	5,556	17	1,170	5,626	1,243	1,401	168	25	186	192	72	59	12	15,727
Michigan	July	225	2	51	121	59	85	3	4	11	4	17	42	2	682
Minnesota	7 Mos.	1,084	6	264	959	445	504	24	4	86	28	106	250	24	3,832
Mississippi	July	1,216	49	353	918	290	554	19	11	33	66	36	29	36	3,612
Missouri	7 Mos.	6,885	251	1,908	6,947	1,434	3,750	156	96	276	370	206	231	181	22,806
Montana	July	384	4	163	474	181	331	7	2	41	11	11	27	11	2,423
Nebraska	7 Mos.	5,131	52	1,088	4,795	1,034	2,519	93	50	429	345	78	128	114	15,827
Nevada	July	503	8	115	474	95	263	2	1	9	18	2	4	11	1,528
New Hampshire	7 Mos.	3,189	62	640	3,284	519	1,903	47	11	107	80	38	66	6	10,019
New Jersey	July	518	1	60	441	125	149	5	4	10	7	5	12	6	1,338
New Mexico	7 Mos.	3,832	15	475	3,275	797	1,211	2	26	116	71	41	107	35	10,003
New York	July	528	4	89	414	147	109	5	8	8	4	10	6	1	1,333
North Carolina	7 Mos.	3,195	17	516	2,736	832	845	61	18	103	80	95	85	24	8,607
North Dakota	July	642	2	97	607	165	144	4	7	15	21	14	9		1,722
Ohio	7 Mos.	4,385	23	662	4,356	911	1,120	44	7	178	113	83	51	4	11,937
Oklahoma	July	190		50	166	56	77	10	2	69	5	11	13	8	602
Oregon	7 Mos.	1,089	2	211	934	316	387	101	2	69	41	94	129	30	3,397
Pennsylvania	July	367		78	272	87	92	14	5	8	25	5	10	4	940
Rhode Island	7 Mos.	2,001	25	508	1,963	282	737	128	29	80	128	40	74	37	6,050
South Carolina	July	329	8	95	316	98	136	26	13	8	21	9	32	25	1,120
South Dakota	7 Mos.	2,117	60	594	2,731	473	1,033	206	53	70	213	83	211	182	8,009
Tennessee	July	1,196	20	316	1,046	308	178	23	14	26	33	17	33	25	3,235
Texas	7 Mos.	7,415	115	1,900	8,008	1,795	1,445	135	115	178	184	151	228	196	21,883
Utah	July	479	7	104	371	135	254	14	2	25	22	10	18	20	1,481
Vermont	7 Mos.	3,340	44	674	3,595	701	1,536	49	25	168	64	59	139	70	10,442
Virginia	July	484		356	149	97	19	19	10	10	2	5	2		1,187
Washington	7 Mos.	3,600	1	476	3,152	893	886	41	5	118	26	30	47	4	9,274
West Virginia	July	833	3	105	626	232	241	5	5	16	28	15	10	10	2,129
Wisconsin	7 Mos.	5,510	89	832	4,824	1,238	1,829	46	22	116	187	71	89	47	14,900
Wyoming	July	251	1	58	174	83	63	11	7	16	7	25	37	4	737
Total	7 Mos.	1,126	2	304	1,075	385	523	34	12	102	37	122	312	30	4,084
Alabama	July	382	16	75	356	111	193	4	1	7	18	7	12	8	1,170
Arizona	7 Mos.	2,148	81	452	2,198	509	1,232	24	18	85	79	60	123	142	7,151
Arkansas	July	67		16	43	23	19			12		4			196
California	7 Mos.	372		158	408	183	204	2	1	87	1	42	102	5	1,563
Colorado	July	66	2	21	61	31	50	7	1	5	7	5	17	5	279
Connecticut	7 Mos.	507	5	160	506	135	169	48	12	40	15	52	98	20	1,773
Delaware	July	563	7	202	445	171	177	25	6	12	63	13	15	33	1,738
District of Columbia	7 Mos.	3,553	77	1,216	3,670	1,169	1,330	303	36	117	376	87	172	209	12,427
Florida	July	256	1	43	137	60	55	3		5	1	16	14	1	582
Georgia	7 Mos.	1,475	13	304	1,123	380	357	45	4	58	14	79	106	15	3,973
Idaho	July	1,481	31	467	1,268	401	791	144	63	33	125	61	75	76	5,066
Illinois	7 Mos.	7,182	203	2,889	7,152	2,054	4,424	726	273	266	766	398	653	443	27,889
Indiana	July	1,014		133	732	235	190	21	3	32	46	16	8	1	2,432
Iowa	7 Mos.	4,954	33	948	4,311	1,005	970	223	14	207	227	99	83	31	13,005
Kansas	July	176		30	149	53	97			12	1	8	4		530
Kentucky	7 Mos.	703	2	198	716	217	581			33	3	21	29	1	2,504
Louisiana	July	1,140	27	327	1,155	322	521	43	14	27	84	28	31	31	3,750
Maine	7 Mos.	7,306	116	1,896	7,813	1,548	3,377	312	103	242	570	222	281	314	24,102
Maryland	July	659	3	97	529	176	168	2	2	17	11	7	13	2	1,686
Massachusetts	7 Mos.	3,767	7	551	3,329	826	1,223	38	11	110	89	40	64	22	10,077
Michigan	July	521	12	119	415	207	160	33	7	59	24	26	95	33	1,711
Minnesota	7 Mos.	2,483	61	598	2,493	905	962	101	26	206	211	188	544	187	8,965
Mississippi	July	1,245	14	366	987	311	558	76	16	41	73	10	76	33	3,821
Missouri	7 Mos.	6,797	101	2,196	6,971	1,493	3,880	568	129	322	550	42	567	172	23,894
Montana	July	92	2	21	72	26	50	10	5	10	4	8	4		304
Nebraska	7 Mos.	490	26	118	517	90	255	49	10	20	42	13	24	21	1,577
Nevada	July	352		64	310	94	66	4		8	4	4	6		910
New Hampshire	7 Mos.	1,980	7	406	1,883	413	423	52	1	54	68	20	22	3	5,332
New Jersey	July	135	1	32	129	50	76			1	7	2	4	7	445
New Mexico	7 Mos.	796	14	209	896	249	653	2	3	38	13	54	98	1	3,024
New York	July	775	2	145	637	205	220	35	10	21	17	18	15	6	2,106
North Carolina	7 Mos.	3,517	19	787	3,480	976	1,099	156	27	114	130	55	51	10	10,423
North Dakota	July	2,976	13	369	2,246	577	641	67	1	62	78	60	47	12	7,149
Ohio	7 Mos.	15,731	81	2,237	14,375	2,611	4,337	253	38	447	696	306	276	76	41,464
Oklahoma	July	299		49	124	56	62	4		3	6	11	21	7	642
Oregon	7 Mos.	819	6	268	772	277	307	18	7	48	28	81	167	30	2,828
Pennsylvania	July	89		13	68	34	26	2	1	3		19	22	3	278
Rhode Island	7 Mos.	456	5	138	419	171	238	8	7	20	2	102	145	11	1,728
South Carolina	July	647	4	114	525	157	144	30	10	22	28	23	24	5	1,733
South Dakota	7 Mos.	3,709	16	854	3,674	824	1,007	294	53	174	153	139	173	50	11,123
Tennessee	July	488	7	156	372	206	169	10	14	20	14	31	48	34	1,569
Texas	7 Mos.	2,329	32	781	2,472	1,083	1,158	96	31	121	114	154	319	112	8,802
Utah	July	289	3	82	278	98	87	9	1	20	10	36	35	2	980
Vermont	7 Mos.	1,702	12	523	1,583	467	463	54	9	91	59	176	201	10	5,380
Virginia	July	590	4	111	444	108	201	4	1	17	13	14	14	18	1,537
Washington	7 Mos.	2,673	16	582	2,777	630	1,632	45	14	104	96	92	128	120	8,909
West Virginia	July	151		24	108	56	35	2	2	8	2	10	44	2	444
Wisconsin	7 Mos.	758	3	153	657	286	267	8	3	29	11	96	255	16	2,542
Wyoming	July														

CCJ's Truck Specifications

COMPILED FROM DATA SUPPLIED EACH MONTH BY MANUFACTURERS

KEY TO DEFINITIONS

MAKE AND MODEL

Only Domestic Truck Models are listed.

OPTIONAL UNITS

For the express purpose of best fitting the truck to the individual job most of the models listed can be provided with optional engines, transmissions, axles, etc., and these models when so equipped are considered standard stock models.

CHASSIS LIST PRICE

The chassis list price applies to the minimum standard wheelbase with standard tires and standard equipment. All prices are F.O.B. factory. Chassis list price does not include the price of the Cab unless otherwise noted.

RECOMMENDED GROSS VEHICLE WEIGHT FOR NORMAL SERVICE

The Gross Weights published herewith are

those supplied by manufacturers as their Recommended Gross Vehicle Weights for Normal Operating Conditions, and are based upon the Maximum Authorized Tire Size listed. In actual practice the manufacturer may either increase or decrease the gross vehicle weight rating when either favorable or unfavorable operating conditions are involved. Since the proper performance of a motor truck depends upon many factors, including grades, road conditions, etc., the gross weights that a manufacturer is prepared to recommend will vary with particular conditions, and the manufacturer's own standard of safety factors. Specific recommendations, therefore, should be obtained from the manufacturer's representative.

CHASSIS WEIGHT

The chassis weight listed includes the weight of the minimum standard wheelbase chassis, with cowl, with standard tires, with standard equipment, with crankcase and cooling system full, and 5 gallons of fuel in the tank. It does not include the

weight of the Cab. This applies to C.O.E. as well as conventional chassis types. Exceptions are noted.

STANDARD TIRE SIZE

The standard tire size listed is that which is included in the Chassis List Price.

MAXIMUM AUTHORIZED TIRE SIZE

The tire size listed in this column is the maximum size recommended by the manufacturer of the chassis for the Gross Vehicle Weight for Normal Operating Conditions. It is furnished at extra cost, if it differs from the standard size. Dual rears are understood; exceptions noted.

MINIMUM STANDARD WHEELBASE

The minimum standard wheelbase is the so-called standard wheelbase on which the Chassis List Price is based.

MAXIMUM STANDARD WHEELBASE

The maximum standard wheelbase is the extreme end of the standard range of wheelbases offered by the chassis maker.

MAXIMUM BRAKE HP.

Maximum Brake Horsepower at Given R.P.M. is actual dynamometer reading without accessories.

GEAR RATIO RANGE

Gear Ratio Range in High—Ratios within the range given are available at no extra cost. Exceptions are noted.

TRACTORS

Unless given the designation (N)—meaning not available as a tractor—all standard models may be assumed to be available as tractors. Exclusively Tractor models are designated (T).

KEY TO ABBREVIATIONS

MAKES—ALL

B—Bendix.
BL—Brown-Lipe.
Bu or Bud—Buda.
BW—Bendix-Westinghouse.
C—Chevrolet.
Cl or Cla—Clark.
Cos—Continental.
Cu or Cum—Cummins-Diesel.
Ea—Easton.
F—Ford.
Fu—Fuller.
G—Goodyear-Hawley type.
H—Hotchkiss.
Her—Hercules.
HS—Holt-Scott.
Int—International Harvester.
L—Lockheed.
LeR—LeRoi.
LH—Lockheed front, Wagner "Hi-Tork" rear.
LT—Lockheed type front Timken rear.
LW—Lockheed front, Wisconsin rear.
M—Midland.
N.P.—New Process.
O or Ov—Own.
Op or Opt—Optional.
Shu—Shuler.
Spi—Spicer.
T or Tim—Timken-Detroit Axle Co.

Tw—Timken-Detroit—Westinghouse.
TW—Timken-Detroit—Wisconsin.
Var—Variable.
WG—Warner Gear.
Wau—Waukesha.
W or Wis—Wisconsin.
WE—Wagner Electric.
Wg—Wagner "Hi-Tork".
Ws—Westinghouse.
WW—Westinghouse or Wagner

WHEELS DRIVEN

2F—Forward unit of Rear Axle Group.
2R—Rear Unit of Rear Axle Group.
4R—Forward and rear units of Rear Axle Group.
6—All wheels.

BRAKES—SERVICE

Location
4—Four wheels, front and rear.
4r—Four Wheels, rear only.
Type
I—Internal.
X—External.
Operation
A—Air.
H—Hydraulic.

V—Vacuum.
D or Dp—Dual Primary.

BRAKES—HAND

Location
C—Center of double propeller shaft.
2—Rear wheels.
4—Four wheels.
6—Six wheels.
P—Back of Power Divider.
J—Jackshaft.
T—Transmission.
F—Driveshaft.

Type

D—Tru-Stop disk.
I—Internal.
M—Mechanical.
X—External.
PD—Two drums on rear of power divider.
F—Mechanical, foot operated

BRAKE DRUMS

Material
a—Cast alloy iron.
A—American Car Foundry.
c—Cast iron.
Cc—Composite Front, Cast Iron in rear.
Cc—Centrifuge.

CI—Copper iron.
Co—Composite.
CX—Front, centrifugal cast; rear, composite.

D—Dayton.

E—Ermalite.

G—Gumite.

N—Nickel iron.

S—Steel.

(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

FRAME

Type
C—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center.
Tf—Tapered front.
A—Straight section side members, lined with oak inserts.

Z—Reinforced (X) member frame, box type sections.
BG—Box girder.
H—Heat treated.

REAR AXLE

Final Drive and Type
R—Bevel.
CD—Chain Drive.
F—Full-floating.
H or Hy—Hypoid.
d—Dual range axle.
2—Double Reduction.
S—Spiral bevel.
W—Worm.
¼—Three Quarters Floating.
½—Semi-Floating.
T—Torque Tube.

GEAR RATIOS

(*) Only one ratio.
Drive and Torque
H—Hotchkiss (springs).
R—Radius Rods.
L—Parallel Torque Rods.
T—Torque Arm.

GOVERNOR STANDARD

V—Yes.
N—No.

KEY TO REFERENCES

c.f.—Cab Forward design.
c.o.e.—Cab-Over-Engine design.
(D)—Diesel-engine equipped.
(T)—Designed for tractor use only.
(C)—Ford or Chevrolet Models.
(R)—Remanufactured Fords.
* Denotes "Includes Cab" when used with weights or prices.

AVAILABLE

* Conventional or C.O.E. available.
† Air brakes available.
‡ Two or three speed auxiliary transmission available.
▲ Two speed rear axle available.

CHEVROLET

* Includes spare tire, full fuel tank and cooling system.
† 7.50/20 can be used on the front with no decrease in GVW when 8.25/20 are used on dual rear wheels.
‡ 8.25/20 front tires are required when 9.00/20 dual rears are used.
▲ 7.50/20 front tires are required when 8.25/20 tires are used on rear.
† "Blue Flame 136" optional.
‡ "Loadmaster" engine optional.
▲ "Jobmaster" engine optional.
† Theoretical I.D. (Journal diameter plus clearance) front 2.6855; front center 2.7165; rear center 2.7475; rear 2.7785. Total effective

length (overall length minus chamfers) 3.747.
‡ Theoretical I.D. (Journal diameter plus clearance) front 2.3014; 2nd 2.3004; 3rd 2.3004; 4th 2.3004; rear 2.3004. Total effective length (overall length minus chamfers) 3.968.
† Overdrive optional.
‡ Synchro-mesh 3-speed H.D. optional.
▲ 4-speed synchro-mesh transmission optional.
* 4.11 available with optional overdrive; 3.55 available with optional powerglide.
† 7.20 available.
‡ Two-speed rear axle available.

3400, 3500 and 3700 TM brakes as options.
† Hydramatic available.
‡ 4.11 available with optional overdrive.
† 18000 GVW available with optional heavy duty equipment.

DODGE

2—Front only; Rear 7.00/16S.
† Front only; Rear 8.25/16S.
‡ Front only; Rear 7.50/20.
† Front only; Rear 9.00/20.
‡ Front only; Rear 10.00/20.
† Front only; Rear 8.25/20.
‡ Two speed rear axle available.
‡ Overdrive available.

DUPLEX

‡ Torque Divider, Timken T70-2 speed.

FABCO

† See same footnote under Chevrolet.
* With 2-speed transfer case.
RC—Chevrolet axle remanufactured.
RF—Ford axle remanufactured.

FORD

* 17000 for 220" Wheelbase.
† Rear Only.
‡ Front Only; Rear 8.25/18S.
† Cowl Axle Dimension.
‡ 9.25x2.94x.25 Optional.
▲ Weight Includer Cab.
† With dual rear wheels only; 118-3500 hp and 195 torque with single wheels.

KENWORTH

† Timken T13129 PA Trailing Axle.
† 14.00/24, front; 16.00/24, rear.
* C.O.E. optional.
† One man cab.
† Torque converter plus Torquematic transmission optional.
‡ Cab beside engine optional.
† Both C.O.E. and cab beside engine optional.
† 14.00/24 front; 18.00/25 rear.
* Cummins NHRBSID 600.
‡ Allison TCL 654 plus TG 607.

MARMON-HERRINGTON

* 132" w.b. only; 154" w.b., 9 1/2 x 2 1/4 x 1 1/4.
† With single wheels; 10,200 with dual wheels.

NAPCO

* NAPCO—Federal Truck Div., Northwestern Auto Parts Company (Chevrolet 4-wheel drive conversion).
† See same footnote under Chevrolet.

OSHKOSH

† Includes cab.
† 1091 cu. in.
* Hydraulic coupling optional.
† Dependent upon engine.

REO

† Model 331-OA and 331-OA LPG engines can be furnished.
† Two speed axle available.
† Double reduction and 2 speed available.
† Buda 6DTS-468 diesel engine available.
‡ Model 255-OA-LPG or 292-OA engine can be furnished.
† Front only; Rear 10.00/20.
‡ OH-160 or OH-160 LPG engine can be furnished.
† OH-160LPG engine can be furnished.
† Model OV-220 engine can be furnished.
† Model OV-225 engine can be furnished.
† Model SQW tandem axle can be furnished.

STUDEBAKER

* H.D. 6.20 or 6.80 optional.
† Two speed 5.93-8.10 optional.
‡ Two speed 6.48-8.86 optional.
‡ Front only; Rear 8.25/20D.
† Front, centrifugal cast; rear, composite.
† Reinforcing plate at rear of frame.

TRUCKSTELL

† Single front, dual rear.
† With 3 speed power divider.
† Weight with cab and maximum tires.
† Including slip-over reinforcing frame channels.
† Air brake optional.

WARD LA FRANCE

‡ Available with optional rear axles.
† Available with 11.00/22 or 12.00/20 tires for G.V.W. of 60,000 lbs and optional front and rear axles.
† Auxiliary transmission, Fuller 3A65, 3B65, 3A92 and 3B92.

WILLYS

* Complete vehicle-Pick-up Type body.
† Three speed transmission, 2 speed transfer case.

(Turn to Next Page, Please)

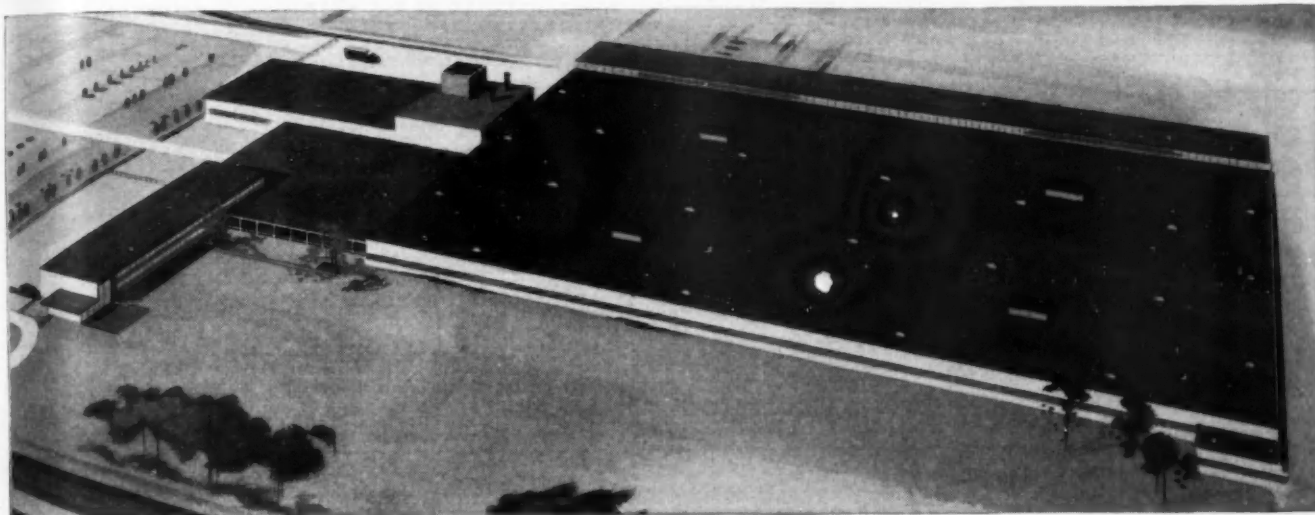
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(Turn to Page 106, Please)

Insist on *Sealed*
LAMP
COMMERCIAL

(Turn to Page 108, Please)

New Automotive Manufacturing Facilities now being built by Thompson



With high compression, speed and power among the biggest features of today's automobile models . . . and tomorrow's too . . . chassis design improvement has become an important factor in future planning.

The big news of 1955 is the recent announcement of a new multimillion-dollar Thompson factory now being built and soon to open in the Detroit area . . . with the world's most modern automotive parts manufacturing facilities, incorporating automation and low-cost operation.

The tremendous acceptance of Thompson steering-linkage, and other chassis parts (including the revolutionary Thompson-

engineered front suspension ball joints) makes this new expansion necessary. Present manufacturing facilities at Thompson plants in Detroit and other cities are already working at full capacity.

The highly efficient layout of the new Detroit plant promises the development of new and advanced manufacturing techniques, finer steering-linkage and suspension parts, and, of course, even better service to Thompson customers. So have your engineers call on Thompson to help iron out your steering-linkage and suspension problems.

Write, wire or phone Thompson Products, Inc., Michigan Division, 7881 Conant Avenue, Detroit 11, Michigan, WA 1-5010.

You can count on Thompson Products

Michigan Division: Detroit • Fruitport • Portland

HOW THOMPSON STEERING-LINKAGE PARTS ARE "TORTURE-TESTED":



Double-Tested—week after week, 24 hours a day, extra-severe punishment is dealt out to Thompson's experimental and standard steering linkages, suspension ball joints, and other chassis parts.



In Addition—these parts undergo further tests in standard-model cars out on the open road . . . not only on average highways, but also on rutty, muddy and snowbound back roads.



Results?—These "torture tests", followed by skilled analyses by experienced Thompson engineers, result in the finest possible linkage and suspension systems for cars, buses, trucks, tractors.

Use Snap-on Torqometers



WHEN THE JOB HAS
GOT TO BE
Right

When the dial of a *Snap-on* Torqometer tells you the job is *right*—Mister, you can bank on it... it's **RIGHT!** Your work is certified. There'll be no comeback. That's why, in shops everywhere, top-notch mechanics *reach for a Torqometer* on every operation where bolt tension is specified. On main bearings. *Cylinder heads*. Connecting rods. *Manifold nuts*. Spark plugs. And on *all important operations* in servicing every type of automatic drive.

Snap-on builds the right size Torqometer for every kind of job. 17 models, 0-30 inch pound to 0-2000 foot pound torque capacity. Next time your *Snap-on* man calls let him demonstrate a Torqometer *on the job*, and help you choose the right model for your work. For free book of Torque specifications covering all makes of cars, trucks, tractors, industrial engines, and big 104-page *Snap-on* catalog, ask your *Snap-on* Man, or write direct to the factory.

SNAP-ON TOOLS CORPORATION

8026-J 28th Avenue, Kenosha, Wis.

* Snap-on is the trademark of Snap-on Tools Corporation.



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For Key to References and Abbreviations See Page 103

NATIONAL ADVERTISING

in *The Science*
Engineering
Journal
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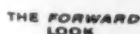
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IN YOUR FLEET!**

Next time you need mufflers for your fleet, choose safe, silent, *longer lasting* MoPar mufflers. They are available at special fleet rates from your Plymouth, Dodge, De Soto, Chrysler dealer, or MoPar parts wholesaler.



"Miss
MOPAR"
says...

**EXHAUST FUMES
CAN BE DANGEROUS**
Does Your Muffler
LOOK LIKE THIS?

**BE SAFE
BE SURE!**
Let Us Install a
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LOOK FOR THIS DISPLAY
—and get your MoPar muffler—
at your Plymouth, Dodge, De Soto
or Chrysler dealer and from many

—and get your MoPar muffler—
at your Plymouth, Dodge, De Soto
or Chrysler dealer and from many
better repair shops.

GET A MUFFLER CHECK TODAY

***Mufflers can be dangerous
without being noisy!***

It's a smart idea to have your muffler checked periodically! Even tiny leaks can mean *carbon monoxide* in your car's interior. (It takes only a small amount of this deadly gas to cause drowsiness and possible accidents!)

Next time you stop for service, have your muffler checked. If you need a new muffler, *play safe*—get a *double-walled* MoPar muffler, designed especially for your Chrysler Corporation car or truck.

MOPAR

PARTS DIVISION • CHRYSLER CORPORATION

Air Starters Stop Troubles at Carolina

Continued from Page 81

For first builds up a pressure of 100 lb in the two brake tanks, an air-gun valve opening at this point and throwing the starting-air tank on the line. When a pressure of 120 lb (150 lb maximum) has been built up in the three tanks, all valves close and the two systems are fully charged. Each system is designed to operate independently and the control valves are so arranged that no one tank can bleed or be bled by another tank.

Weight Savings

Weight means money to every motor carrier. With present tractor-trailer gross weight restrictions, the less weight carried in a tractor the more pay load that can be carried in its trailer. According to Mr. C. G. Beam, president of Carolina Freight Carriers, weight is one of the major factors he takes into consideration in purchasing a tractor. To determine how much additional freight revenue the lightweight air-starting systems have made possible, therefore, Carolina Freight weighed the electrical equipment eliminated on the new Mack tractors and subtracted the weight of the pneumatic equipment. It found that by eliminating two 6-volt batteries (124 lb), an over-size battery box (20 lb), 20 ft of battery cable (5 lb), a series-parallel switch (3 lb), and a solenoid switch (1 lb), the air-cranking systems eliminated a total of 153 lb from each tractor's gross weight. At the same time, the air-cranking systems replaced a total of only 55 lb represented by a 40-lb aluminum starting-air tank, a 10-lb battery box, and copper tubing and valves weighing 5 lb. The electric-starting armatures and air-cranking motors were eliminated from these two tables because they are equal in weight. The result is a weight saving of approximately 98 lb per tractor.

Tests by Carolina Freight's maintenance crew indicates that

a single starting-air tank has sufficient capacity even in cold weather to crank each diesel approximately 4 times before exhaustion. In practice, of course, it is only necessary to kick a diesel over a couple of times to start it. The compressor keeps the sys-

tem at or near full charge at all times the tractor is in operation.

In emergencies, however, the tank can be recharged in a matter of minutes either at the maintenance shop, at any service station or by a passing tractor. At such times a convenient hand-shaker coupling can be snapped into place or else a conventional needle valve used.

END

Please Resume Reading Page 82

YOU CAN GET PROOF That ATI "Engine Mated" MUFFLERS

GIVE YOU

- MINIMUM BACK PRESSURE
- MAXIMUM QUIET
- BETTER FIT
- BIGGER PROFITS!



- Let your nearest ATI distributor prove to you today that ATI "Engine Mated" Mufflers give you all the advantages others can only claim. You get these advantages because only ATI heavy duty, heavy gauge all-welded steel mufflers are custom specified to the cubic inch displacement of each of your truck and bus engines. **ONLY ATI MUFFLERS FIT YOUR ENGINE . . . NOT JUST THE EXHAUST PIPE . . .** to give you maximum performance—quietly.

Shown in the box at right is what operators everywhere are getting from ATI "Engine Mated" Mufflers. Get proof of all these claims from your nearest ATI supplier today. If you don't know his name, fill out and mail the coupon. We'll get details to you at once.

MAXIMUM QUIET

ATI Mufflers perform well under noise standards established by the A.T.A. and A.M.A. They eliminate fines, noise complaints . . . give better driver comfort, less fatigue.

MINIMUM BACK PRESSURE

ATI Mufflers meet or beat engine manufacturers' requirements to give you increased engine performance, greater fuel mileage . . . more horsepower.

BETTER FIT

For maximum operating efficiency, greater safety, less danger from CO fumes . . . for ease of installation.

BIGGER PROFITS

ATI "Engine Mated" Mufflers mean lower cost per mile, longer life, fewer replacements, less maintenance.



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manufacturers of replacement mufflers, wheel dollies

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Dept. CCJ

SOL-SPEEDI-DRI

THE NATION'S NO. 1
OIL AND GREASE ABSORBENT

new!
improved!

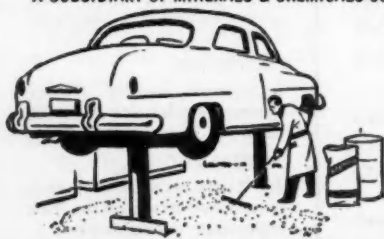


Now, more than ever before, Sol-Speedi-Dri is the answer to your safety and maintenance problems. Vastly improved, Sol is now lighter in weight . . . has greater volume . . . each 50-pound bag goes farther. It absorbs more oil and grease and other liquids . . . requires less frequent replacement . . . offers new freedom from dust nuisance. And Sol's hard granules take more traffic than ever . . . keep floors slip-resistant!

See for yourself. Try the new, improved Sol-Speedi-Dri! Send for a free sample . . . and the new "101 Uses" folder.

SPEEDI-DRI CORPORATION 210 W. Washington Sq., Phila. 5, Pa.

A SUBSIDIARY OF MINERALS & CHEMICALS CORPORATION OF AMERICA



For cleaner, safer floors

Warehouse stocks and sales service maintained in principal cities of the United States and Canada.

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☐ Send free sample

☐ Send "101 Uses" folder

Name.....

Address.....

City.....State.....



LP Gas Conversions

Continued from Page 75

The firm's trucks can fill up at any one of four stations within the city, and have a choice of nine more in the suburbs.

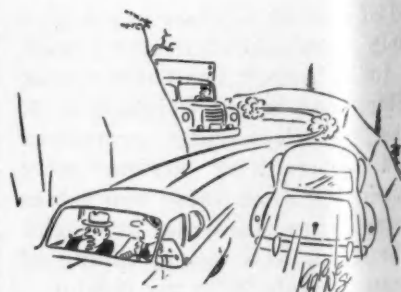
"In the 14 years we've been operating on propane, I don't think our trucks have had to go out of their way to fuel up more than a dozen times," Pres. Riley commented. And, since all the trucks are equipped with dual carburetion systems—gasoline and propane—there is virtually no danger they will be stuck high and dry.

The trucks are equipped with saddlebag-type fuel tanks mounted on the frame just behind the cab. Each tank holds 32 gal on the smaller trucks, 65 on the semi units. The fuel gage—there's one on each tank—consists usually of a small arm connected to a dip tube inside. The arm is rotated manually over a calibrated dial, moving the dip tube as well. When the tube hits the top of the liquid propane stored in the tank, gas shoots out through an escape valve next to the dial. The driver merely reads the dial to find out how much fuel he has.

Cost of converting the trucks came to approximately \$5200. Riley purchased parts and did all the work in its own shop. Pres. Riley sums up his attitude toward the investment by saying: "Anytime I can invest \$5000 and get \$4000 back each year I'm convinced the money has been well-spent."

END

Please Resume Reading Page 76



"Then there's my wife's brother, the one who's a gambler!"

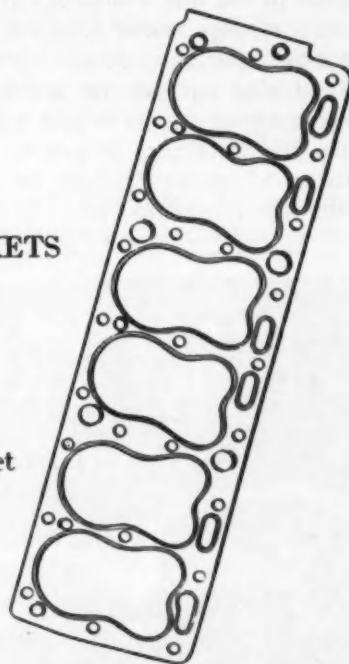
FITZ
...S
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give you the p
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GASOLINE AND
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FITZGERALD GASKETS

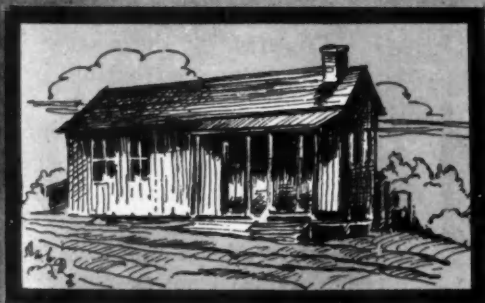
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FITZGERALD METALLIC ALUMINUM FUSED ASBESTOS GASKETS

give you the perfect answer to your need for a perfect, lasting seal against the higher heat and pressures of modern high compression engines. Just as our "log cabin factory" of 1906 has grown to our present plant, so have Fitzgerald Gaskets kept pace with the engineering advances of the automotive industry. A truly complete line, there's a Fitzgerald Gasket for every engine . . . gasoline or diesel.



also... GREASE RETAINERS • CORK GASKETS FITZ-RITE TREATED FIBRE GASKETS FOR OIL, GASOLINE AND WATER CONNECTIONS COMPLETE SETS FOR MOTOR REBUILDERS



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THE FITZGERALD MANUFACTURING COMPANY
TORRINGTON, CONNECTICUT

Canadian FITZGERALD Ltd.—Toronto, Canada
Branch and Warehouse—Los Angeles, California; Chicago, Illinois

Southern Penn Builds Rotary Bus Washer

Continued from Page 71

nected in the unit's control circuit.

The storage tanks for this detergent are two 55-gal drums placed side by side on a frame. Soap solution is put in and a line from the water tap is run to the bottom of each. Outlets to the pump are placed in the center of

the bottom of the barrels and an overflow valve is set into one tank for a water level control.

Automatic Operation

Operation of the washer is all automatic. Control of the water and the detergent is accomplished

through three sets of micro switches placed above the coach: (1) to turn on the water and solution, (2) to hold in an on position while the coach passes through, and (3) to turn off as the coach leaves the washer.

The micro switch installation consists of a flat plate welded to a pipe hanger. The switch is bolted to a top plate and similar bottom plate which serves as a mounting for the bus contact. This is a section of heater hose long enough to reach the top of the bus as it passes through. Actuation of the micro switch by the bus energizes a solenoid-operated control which turns on the detergent pump and (with a parallel hookup) opens the water supply valve. Shut off is accomplished in reverse order through a similar hookup.

Buses Go On Rails

The coaches are guided through the washer through guide rails placed on the floor to eliminate any possibility of damage to the uprights.

Powering of the washer in this way has cut wash time per unit to less than 10 minutes. Labor has been reduced to one man driving the coach through and one washing down the fronts and rears with a hand mop. And in addition the company says they are doing a much better job of keeping equipment clean.

END

Please Resume Reading Page 72

EXACT PRINTED RECORDS

mean low cost inventory
and cost control




BENNETT

Model 789 Fleetmeter automatically keeps gas records

Built around the famed Bennett pump with its low maintenance cost and simple, trouble-free design, the Bennett Fleetmeter is the most economical method of handling fuel not intended for resale. Fleet garages, boat docks, bus terminals, farms... everywhere inventory control and unit operating cost systems are wanted...there's a spot for a Bennett Fleetmeter.

Ask your John Wood representative about the two basic models—Model 789 that *automatically* prints a receipt, keeps a running record of total gallons dispensed and eliminates errors, and Model 788 with high visibility index and concealed totalizer.

JOHN WOOD COMPANY



Bennett Pump Division
Muskegon, Michigan

In Canada: Toronto • Montreal
Winnipeg • Vancouver



"Got the Tennessee run, did you?"

PROTECTION

...where it's needed

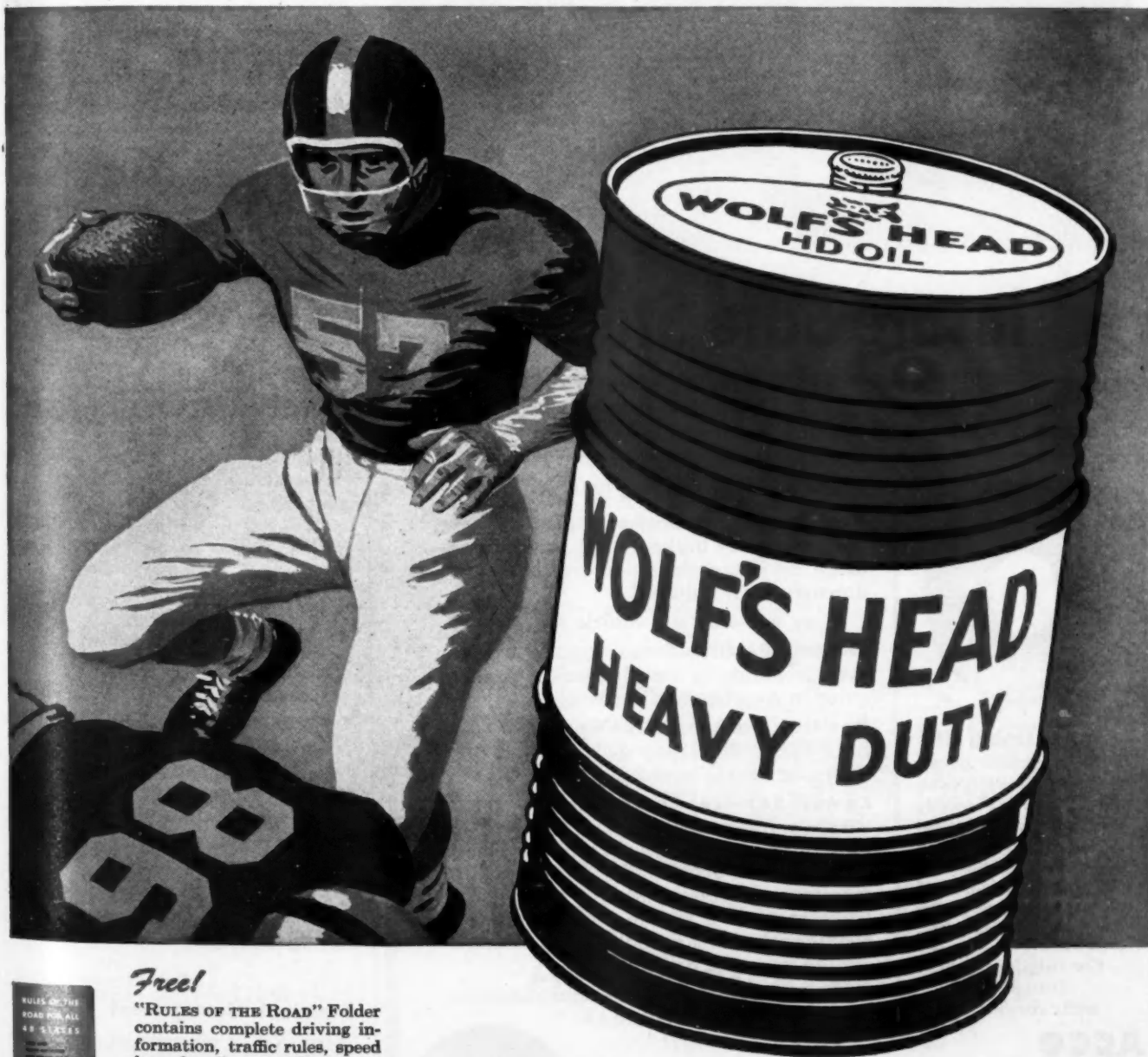
Like a helmet protects a football player, WOLF'S HEAD protects car and truck engines from unnecessary damage.

WOLF'S HEAD Motor Oil—100% Pure Pennsylvania—is specially refined three extra steps from nature's finest crude oil. It stays rich and tough every mile of the way. And WOLF'S HEAD is

scientifically fortified . . . it cleans as it lubricates.

WOLF'S HEAD Heavy Duty Motor Oil provides exceptional film strength and high detergency for vehicles in heavy duty service, protecting engines against corrosive wear. And it holds oil consumption to a minimum.

Ask about the free WOLF'S HEAD Laboratory Control Plan. It keeps your fleet rolling with less down time.



Free!

"RULES OF THE ROAD" Folder contains complete driving information, traffic rules, speed laws for all states. Give them to your drivers.

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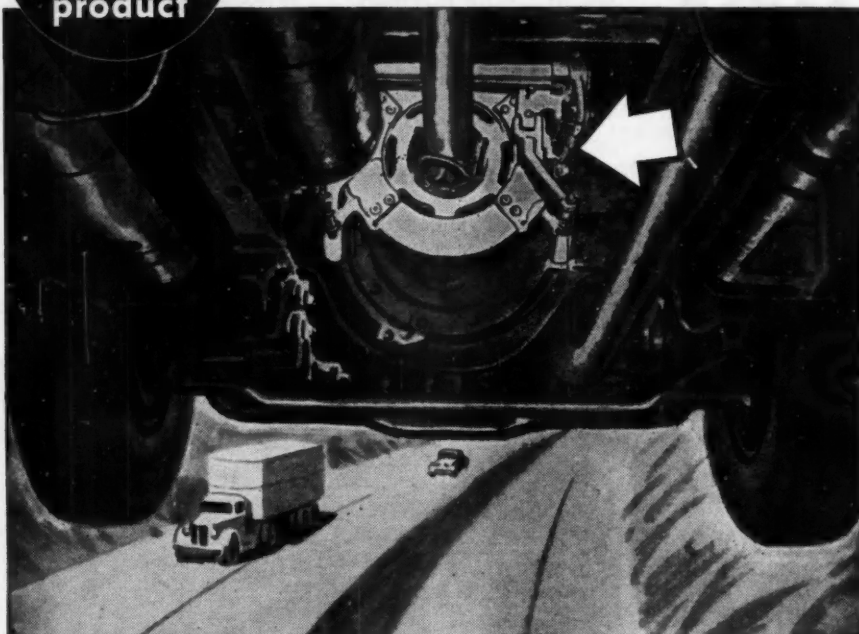
100% Pure Pennsylvania—Scientifically Fortified



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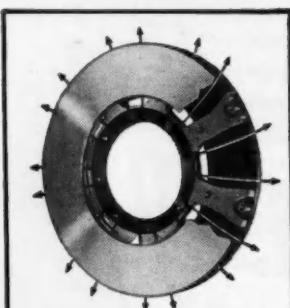
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Specify Tru-Stop Emergency Brakes



Insure Safe Stops!

• Leading manufacturers of trucks, buses, tractors and special equipment offer TRU-STOP Disc-Type Emergency Brakes, either as standard or optional equipment. Wise buyers insist on factory installation of TRU-STOPS to get all these braking extras:



Longer Lining Life

• The terrific heat generated in braking cuts lining life. TRU-STOPS quickly dissipate this heat. Most of the disc is exposed to the air even during braking. And a cooling jet of air circulates through the disc, prolongs lining life.

For full details on
TRU-STOP
write for booklet

Real Emergency Brakes. TRU-STOPS are real emergency brakes—they serve as auxiliary brakes, assisting service brakes on downgrades if required.

They will stop the vehicle too.

Smooth, Positive Stops. TRU-STOPS prevent accidents by insuring quick, positive stops in emergency situations.

Positive Parking Brakes. TRU-STOPS hold safely on steep grades—prevent "parking brake" accidents.

Lower Service Requirements. TRU-STOPS seldom need service. Mounted directly on the drive shaft, their simplicity of design and accessibility greatly reduce maintenance requirements. Relining or adjustment is a simple job for any mechanic with ordinary tools. It is not necessary to drop the drive shaft.

Specify TRU-STOPS for factory installation on your next vehicle.

ACCO



**Automotive and Aircraft Division
AMERICAN CHAIN & CABLE**

601 Stephenson Bldg., Detroit 2
2216 South Garfield Ave., Los Angeles 22 • Bridgeport 2, Conn.

**TRU-STOP
Emergency
Brakes**

Optimum Cube

Continued from Page 92

stiffness (i.e. resistance to side wall pressure), a gain in strength and only a small increase in weight.

By using solid aluminum posts they could cut the side wall another $\frac{1}{8}$ in. but in so doing gained only 6 cu ft and nearly doubled the weight.

Still more cube could be obtained by using a solid aluminum sheet. But this time weight was doubled again, stiffness was cut to below acceptable standards, to say nothing of increased cost—all for a gain of another 18 cu ft.

As a result of these calculations example 2 was selected as the "optimum" design representing the most practical combination of all factors for general freight handling.

END

Please Resume Reading Page 94

Fleet Training Courses

HERE is 1955's calendar of fleet training courses. For complete addresses to write to for full information about the courses, see COMMERCIAL CAR JOURNAL'S November, 1954, issue, page 237.

Fleet Supervisor Courses

Oct. 31-Nov. 4—University of Minnesota.

Nov. 14-18—University of Michigan.

Nov. 28-Dec. 2—University of Akron (Ohio).

Driver Training

North Carolina State College (one month long courses starting Oct. 31, Nov. 28).

Terminal Management

Dec. 7-9—University of Tennessee.

Fleet Maintenance Courses

Nov. 1-3—Oregon State College.

Nov. 7-9—Montana Motor Transport Assn. (Billings.)

COMMERCIAL CAR JOURNAL, October, 1955

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Avoid
break-in
problems
INSTALL THE
PRE-SEATED RING SET

AMERICAN HAMMERED Pre-seated Krome-Oil PISTON RING SETS

Pre-seated narrow land contact surface of Krome-Oil top groove compression ring

Pre-seating means early break-in, fewer costly hours on the break-in stand. It is a factory-applied lapping process for the top groove compression ring which is equivalent to many hundreds of miles of actual engine operation. Install chrome, with its long wearing qualities, confidently because Krome-Oil rings are pre-seated. They break-in instantly, deliver premium performance all the way.

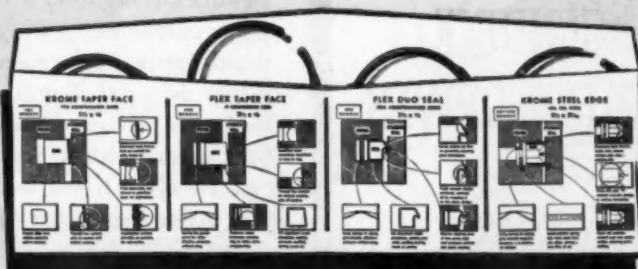


Look for chrome here... to install a full chrome ring set

When you install chrome, be sure you're installing a full chrome ring set. Check for chrome on the top groove compression ring, on the side rails of the oil ring. Install chrome confidently because Krome-Oil is pre-seated. Krome-Oil seats instantly, doesn't scuff, and pays off in longer engine life.

All-in-one ring envelope

All-in-one ring envelope contains all the rings for one piston. They're packaged in this envelope in the order of installation. This prevents mix-ups, saves yours or mechanic's time. A real help and time-saver in the shop.



Install Krome-Oil
the chrome ring set
with all the answers

American Hammered

AUTOMOTIVE REPLACEMENT DIVISION

2001 Sanford Street • Muskegon, Michigan

Manufacturers of American Hammered Automotive Replacement Piston Rings.
A Division of Sealed Power Corporation

For the best in fleet maintenance remember American Hammered
Power-Plus Service—Koetherizing • GI-60 Groove Insert • Dry Film Lubricant

Piggy-Back Experiences Growing Pains

Continued from Page 70

ft long), the charge is \$119.50 between Chicago and Council Bluffs-Kansas City, and \$104.50 between Chicago and Minneapolis-St. Paul. C&GW officials report they are currently moving approximately 50 trailers a day.

According to Eugene Ryan, Rail-

Trailer Co. president, and most other officials concerned with TOFC service, trip-time should come down in the near future. They're putting a great deal of hope in the use of side loading. At present, flatcars are end or circus-loaded. It is thought that when

side loading equipment and facilities are available in quantity—a time that is reportedly not far off—overall shipping time will be reduced by several hours.

Another possibility is that charges for TOFC service will come down as the volume of TOFC shipments increases. Already, even though the service is little more than barely started, Pennsy has agreed to one rate cut. Originally, the cost of shipping a trailer with a gross weight of 32,500 to 42,500 lb between Chicago and New York was \$190, and between Chicago and Philadelphia, \$172.75. Rates are now as much as \$21 less.

Captive TOFC

It will be obvious that most of this discussion centers around the railroad operations in the Chicago area primarily the Pennsylvania—the world's largest railroad and biggest new entry in the field of common carrier piggy-back service. How is the service doing and how does it compare with the "captive" or all-rail-owned TOFC arrangements? What does rail management and truck management think of the so-called wedding between the fighting rivals?

The argument runs something like this: "We are showing the shipper by example," say the truckers, "that moving his freight by flatcar has advantages over moving it by highway. Many railroads operate their own pickup and delivery equipment. Aren't we dealing ourselves out of the picture by making it possible for the railroads to pick up our business in their trucks?"

Says PRR's Newell

Recent remarks of J. P. Newell, vice-president of operations for the Pennsylvania Railroad and an enthusiastic supporter of piggy-back, indicate that if the railroads aren't willing to throw their trucks away at the moment, at least they're looking at the question of coordinated vs. all-rail TOFC service with an open mind. Said Newell:

"By far the most critical issue is whether there will be a definite railroad trend, based on experience,

(TURN TO PAGE 130, PLEASE)



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PARTS!**



You can be proud of every repair job when you use only genuine parts. When it comes to servicing Bendix* Drives, be sure to use only *factory new* Bendix Drives and Parts. This means your customers will get the same dependable performance built into every original Bendix Drive—performance proven by over 100,000,000 installations. Insist on *factory new* Bendix Drives and Parts when you order from your distributor.

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Bendix Drive

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AVIATION CORPORATION

Export Sales: Bendix International Division, 205 East 42nd St., New York 17, New York

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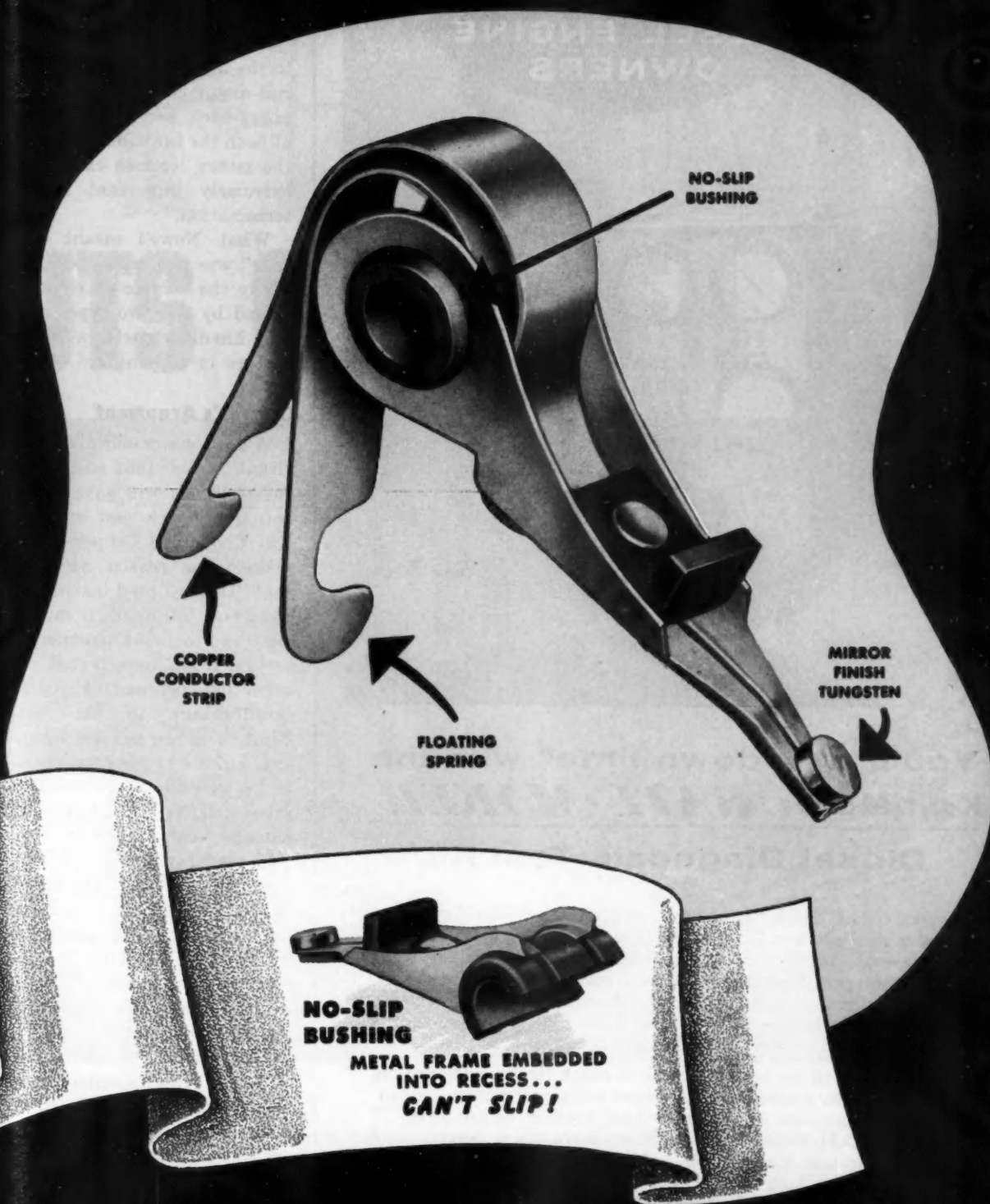
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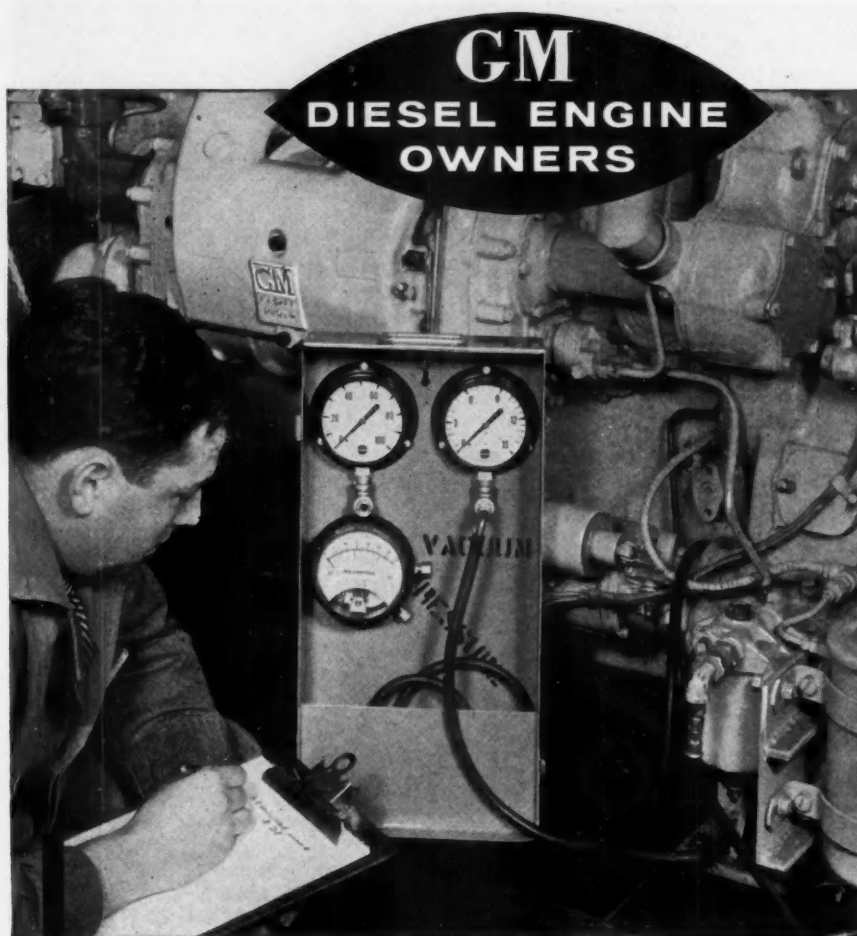
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COMMERCIAL CAR JOURNAL, October, 1955



You'll cut "down time" with the KENT-MOORE **RATE-MAKER**

Diesel Diagnosis Test Kit

Fact is, you'll reduce diesel "down time" on two fronts when your shop is equipped with a portable Rate-Maker Diagnosis Test Kit. First, you'll catch most potential trouble-makers when they're still "potential" by using the kit to run your periodic preventative maintenance checks. And second, if one of those unpreventable breakdowns does occur, the kit provides you with an accurate trouble-shooting tool that'll help you speed repairs by quickly locating the cause of the failure.

Yes, the kit contains all the tools you need to check timing, compression, exhaust back pressure, engine R.P.M., blower intake, restriction, air box, oil and crankcase pressure, and cylinder liner position on all Series 71 and Model 6-110 G.M. Diesel Engines. What's more, it's so compact and convenient you can take it to the job... in the shop or out in the field! So cut "down time" in your shop! Order your Kent-Moore Rate-Maker Diesel Engine Diagnosis Test Kit today!

► ILLUSTRATED—the J 4209-41 Basic Kit plus fuel pressure gauge and compression gauges for both Series 71 and Model 6-110 Engines. Note that hinged case can be separated for greater convenience in use. Standard Kits available for: Series 71 engines only; Model 6-110 engines only; GMC Trucks; GMC Coaches; and Le-Tourneau-Westinghouse installations. Write for information now!



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5-105 General Motors Bldg. • Detroit 2, Michigan
ENGINEERS AND MANUFACTURERS OF SPECIAL AUTOMOTIVE SERVICE TOOLS AND EQUIPMENT



Piggy-Back's Growing Pains

Continued from Page 126

to the all-rail or to the coordinated rail-motor common carrier type of piggy-back service. The attitude of both the individual railroads and the motor common carriers will be extremely important in this determination."

What Newell meant by "attitude" was not made clear, but certainly the volume of business generated by the two types of TOFC, plus handling costs, will be major factors in shaping it.

Cooper's Argument

A good many officials close to the situation feel that sooner or later, the railroads will have to drop all-rail piggy-back and split the pie. Guy Cooper, of Cooper-Jarrett, explained one reason why when he said "If a railroad insists on doing the whole job itself, it must devote time and money to competing with several truck lines in each terminal area. The railroad usually is at a disadvantage in this struggle. First, it is one against many. Second, since a trucker knows nothing if he doesn't know trucking, his sales solicitation costs, loss and damage and trailer maintenance bills, to mention a few of many expenses, normally are lower than what the railroad would have in handling the same business.

"By working with truckers, instead of against them, the railroad gets rid of these costs, yet still profits from TOFC shipments," Cooper continued. For then, instead of being enemies, the truckers are the railroad's customers. And chances are they will supply even more volume, and net income, than the railroad could obtain on its own.

Ryan Is Optimistic

Add Eugene F. Ryan, whose Rail-Trailer Co. handles motor common carrier trailers shipped on the Pennsy: "A railroad can make more net revenue by moving motor common carrier trailers in a strictly line-haul service, and collecting a portion of the through rate, than

(TURN TO PAGE 132, PLEASE)

CUT

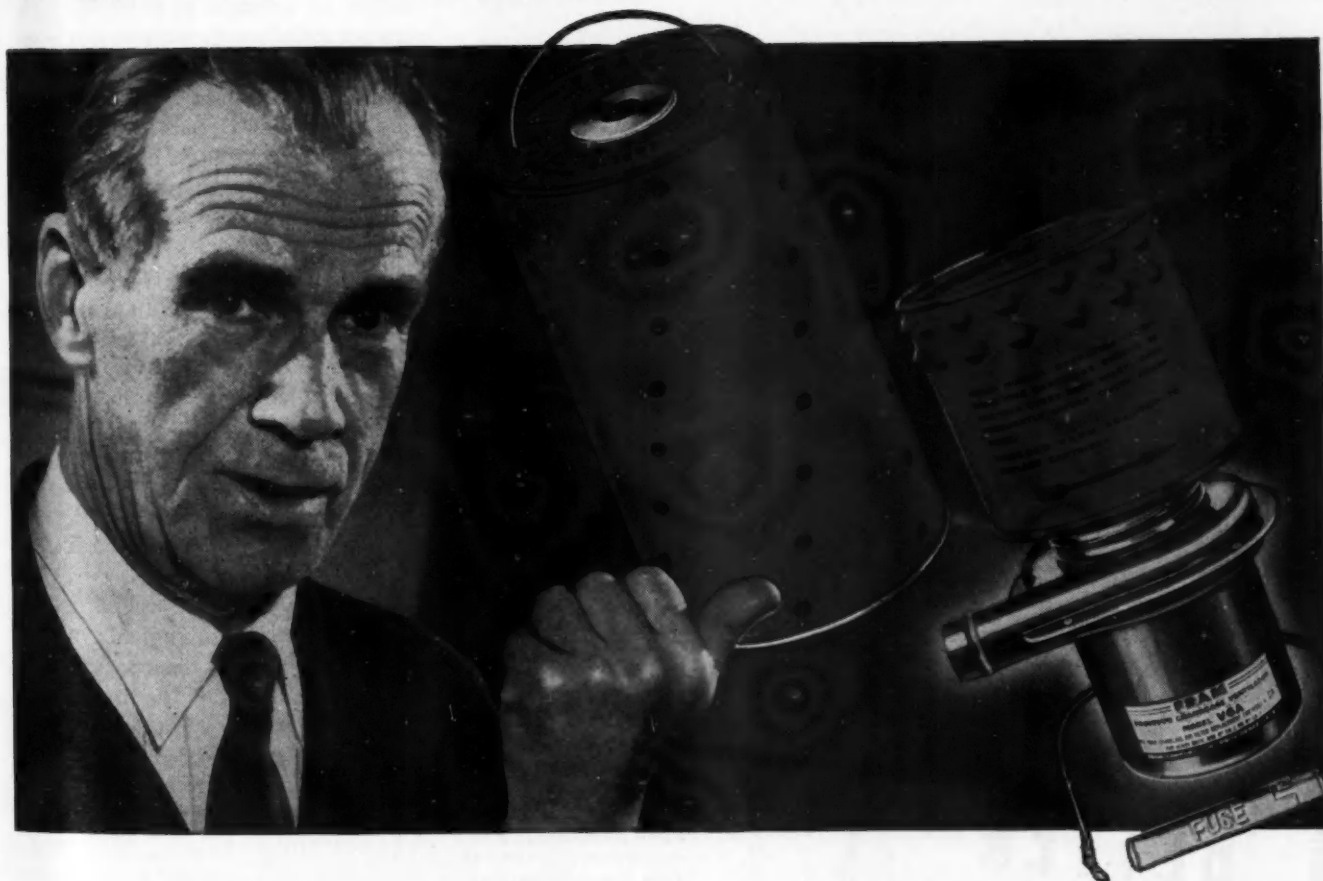


It's a
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CUTS COST PER MILE



It's a fact fleet operators prove every day! FRAM Cartridges cut costs on operation, maintenance and repairs because FRAM keeps oil and engines *clean*. Result? Power-robbing sludge and contaminants are trapped out . . . you get thousands of extra engine miles between overhauls! That means longer service at less cost per mile! Prove it yourself—get FRAM Cartridges for your engines today!

And don't forget! Corrosive sludge and acid-forming blow-by gases cost you fleet profits, too. Stop these engine-killers with FRAM Positive Crankcase Ventilators. A

FRAM Positive Crankcase Ventilator circulates clean, fresh air through the crankcase at all speeds, pays for itself in longer engine life!

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FRAM

OIL • AIR • FUEL • WATER

FILTERS

FRAM CORPORATION,
Providence 16, R. I.
Fram Canada Ltd.,
Stratford, O.

Piggy-Back's Growing Pains

Continued from Page 130

it can by collecting the whole rate and performing the whole service. There is relatively little empty car mileage when common carrier trailers are moved, while the non-revenue producing mileage in all-rail trailer-flatcar service can be as high as 35 per cent."

If and when the trucking in-

dustry can fill enough flatcars, it will be strategically placed to convince railroaders they should stay in their own backyard.

Rail-Trailer Grows

That this strategic position is not too far away is indicated by the rapid growth of the Rail-Trailer Company's coordinated TOFC service since last March when the Chicago firm moved its first load. These figures, of course,

apply to motor common carrier trailers handled by only one road—the Pennsy. Three other lines—the New Haven, Katy, and C&GW, accept similar shipments. But the sample indicates the trend, which is the important thing here.

In its first month, Rail-Trailer moved 654 trailers. By early summer, movements had climbed to approximately 1000 trailers a month. During August, when this story was written, RTC's research director, Palmer Bayer, indicated that more than 1500 trailers would be handled.

According to RTC, Pennsy receives an average of \$190 for each trailer load it gets from motor common carriers. August business thus would amount to \$285,000 for the railroad. Experts estimate it would take a million dollars worth a month, at least, before a railroad would listen to arguments against all-rail service from the truckers. However, at the rate TOFC service is growing, this volume is considered probably within the near future. Another point that should help the railroads decide: where flatcar service is available to motor common carriers, they are supplying by far the major portion of the trailers shipped.

What about non-mainline TOFC shipments? Most experts feel that these are a remote possibility unless trip times are radically shortened. A major reason, explains Guy Cooper, is that the more often the trailer train stops, the less desirable the service becomes to the motor common carrier, since each stop increases shipping time between mainline points. With present railroad operating efficiency, you can figure a delay of at least an hour and probably more for each non-mainline stop, he points out. Thus, for stops along the way to be possible, schedules would have to be souped up considerably.

In other words, the success of the latest rapprochement between railroaders and truckers will be decided largely by whether schedules can be improved and handling and shipping costs can be cut. If they can, there is little doubt that this time, the marriage will last.

END

Please Resume Reading Page 71

Here's Why!

RMC

"Super-Duty"

VALVES

give

BETTER

"Heavy Duty"

PERFORMANCE



TWO PIECE CONSTRUCTION

Head and upper stem, made of Austenitic steel, provide longer life under excessive pounding and extreme temperatures.

HEAT BANDS

Special RMC Heat resisting Alloy welded around top edge of head on applications when burning is a problem. Cuts burning through top of Valve to a minimum.

STELLITE FACE

Holds its face under extreme temperatures. Provides better, truer seating; gives longer, better performance—reduces valve grinds.

Look for this seal on every RMC "Super-Duty" Valve box.



RICH MANUFACTURING

BATTLE CREEK
MICH., U.S.A.

BASIC VALVE MANUFACTURER

FOR ORIGINAL EQUIPMENT

SINCE 1908

"AUSC

says G
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Here's

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Ausco Hydr
Jacks are
in 20, 12, 8,
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COMMERCIAL

"AUSCO DEPENDABILITY helps carry out our SERVICE aim..."

says Gustav Rostalski,
Pioneer Auto Body Company
Chicago, Illinois.

Here's how Ausco Hydraulic Axle Jacks
"fill the bill" for Mr. Rostalski:

"Our Ausco Hydraulic Axle Jacks
have given us excellent service.
We strive to keep our service as
dependable as possible, and Ausco
Jacks help us carry out this
aim. They operate easily and
dependably in our operations."



Ausco Hydraulic Axle
Jacks are available
in 20, 12, 8, 5, 3 and
1½-ton models
Standard Range and
12, 8, 5 and 3-ton
Hi-Range models.



DEPENDABILITY—from the ground up—is built
into every Ausco Hydraulic Axle Jack. Ausco's
own non-porous casting guarantees that each unit
is leakproof and unbreakable!

For long life and easy-to-use service, Ausco
straight-line oil flow system can't clog or jam—
eliminates hydraulic operating troubles.
Safety valve prevents overload damage.

**Call your Ausco Jobber today for a
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Ausco manufactures quality jacks
job-matched to every automotive
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Hydraulic
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One-End Lifts



Mechanical
Axle and
Bumper Jacks



Hydraulic
Service Jacks

Ford Ups Horsepower in '56 Models

Continued from Page 95

T-800, give Ford an expanded line of trucks in the tandem axle class for 1956. The new model has a GVW of 36,000 lb.

The standard engine for these models is a 332-cu in. Y-8 rated at 190 hp. Optional heavy duty 332-cu in. Y-8 engine is rated at 200

hp with four barrel carburetion, dual exhausts and a special fresh air intake. Gross vehicle weights of the T-700 and T-800 are 28,000 and 42,000 lb respectively.

Safety Features

Every truck in Ford's 1956 line

introduces two safety devices as standard equipment. They are an energy-absorbing steering wheel and safety door locks. The new safety equipment is part of Ford's 1956 "lifeguard design."

The new energy-absorbing steering wheel is designed so that the upper surface of the rim is three inches above the horn button. It is designed to absorb the impact of the driver's body if he is thrown forward in an accident. The three-spoke wheel distributes the impact force over the driver's body, and gives him added protection from striking the steering column.

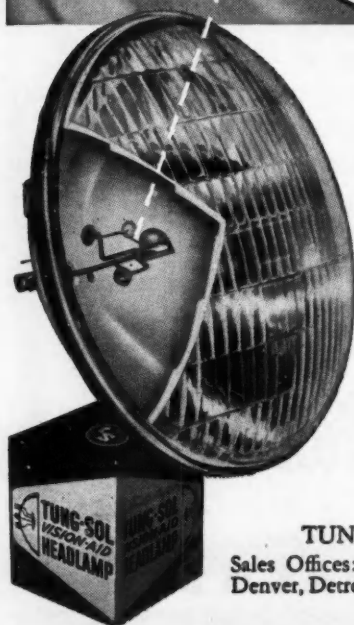
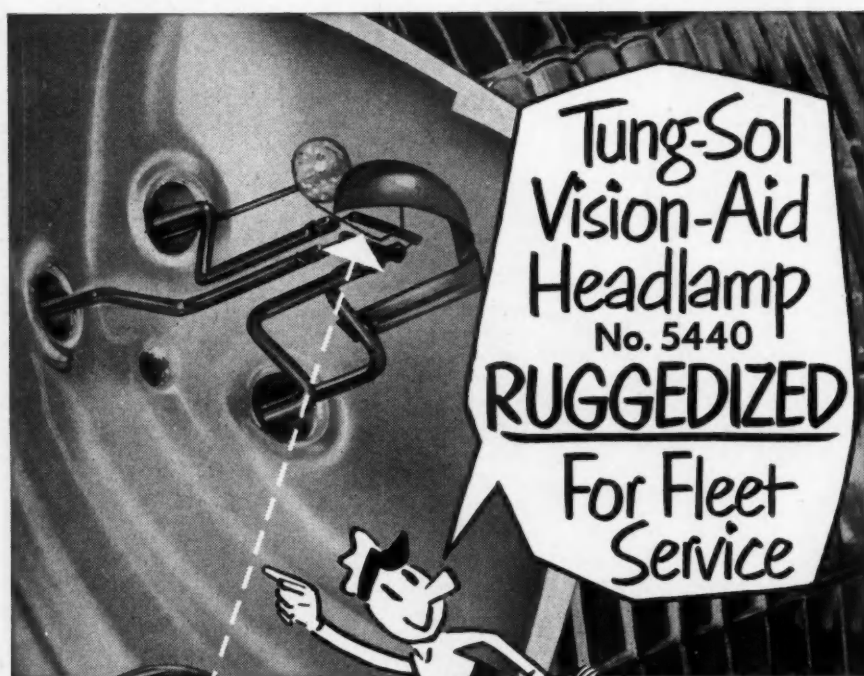
The new safety door lock holds latching rotor teeth in place and reduces the chance of the door opening under impact. This helps prevent the driver or passenger from being thrown out of the cab. Research statistics show that a driver's chance of avoiding injury is more than twice as great if he remains inside the vehicle.

Safety belts are offered as optional equipment on all trucks.

Tubeless tires are standard equipment this year. Larger payloads can be carried because tubeless tires and wheels weigh less. They also are said to reduce tire-change time up to 70 per cent which is important to a trucker with as many as 10 tires on his truck.

Cab Design

Ford's 1956 trucks have a new (TURN TO PAGE 136, PLEASE)



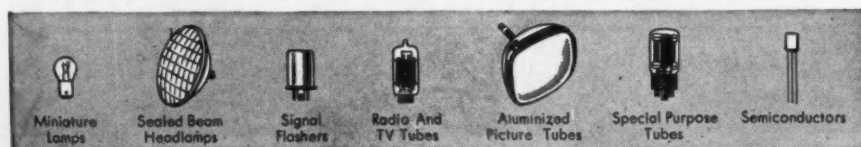
The 12-volt model of the new Vision-Aid Headlamp that gives 80 extra feet of seeing distance and eliminates the glare-back of rain, fog and snow is now ruggedized for truck and bus fleet use.

Ruggedized construction means longer, trouble-free service under the most severe operating conditions. A center support keeps the top filament from sagging . . . prevents shorts and premature burnouts.

Reduce fleet maintenance costs. Assure new operation efficiency. Switch to ruggedized Tung-Sol Vision-Aid Headlamps.

TUNG-SOL ELECTRIC INC., Newark 4, N. J.

Sales Offices: Atlanta, Chicago, Columbus, Culver City, Dallas, Denver, Detroit, Newark, Philadelphia, Seattle. Canada: Montreal.



"Either this truck or my Hudson has got to go!"

TR



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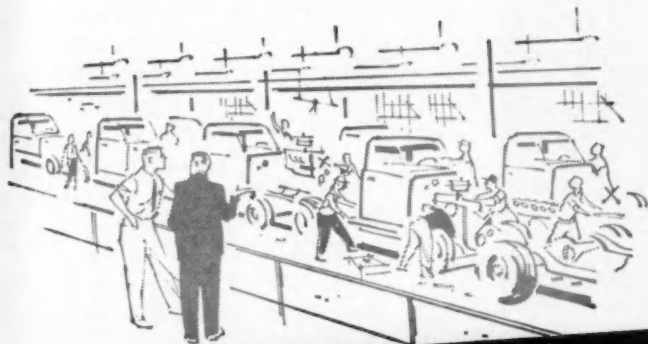
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ZENITH
 CARBURETORS

would be *his* choice

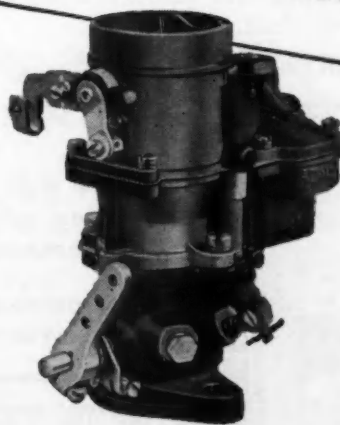
The successful truck dealer is in the business of selling customer satisfaction as well as retailing trucks. For it is obvious that unless a dealer enjoys a substantial volume of repeat business he is going to have trouble operating at a profit.

Therefore, shrewd truck dealers are vitally interested in the performance of such important components as carburetors. It is for this reason that the outstanding performance characteristics of Zenith* Carburetors, under every operating condition, have made Zenith the dealer's choice.

Therefore, it just seems reasonable that if truck dealers were engineering trucks for complete customer satisfaction, performance proven Zenith Carburetors would be their choice for standard equipment.

Further evidence why—if you build, buy, sell or operate trucks, Zenith should be your choice for the finest in carburetion.

*REG. U. S. PAT. OFF.



ZENITH CARBURETOR DIVISION OF



696 Hart Avenue • Detroit 14, Michigan • Export Sales: Bendix International Division, 205 East 42nd St., New York 17, N. Y.

Foote Lithium Does It!



Connecticut Railway and Lighting Doubles Mileage Between Wheel Lubes

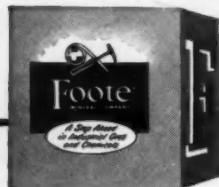
... and that's only part of the story of lithium base multi-purpose grease used on 297 buses rolling for Connecticut Railway and Lighting Co., Bridgeport, Conn.

Experience has proven that this *ONE* lithium grease also does a top job on chassis lubrication. Spring pins, shackles, steering mechanisms, king pins, all show increased life because of lithium lubrication.

And this is not just a test—C. R. & L. has been using lithium multi-purpose grease for five years! Lithium grease takes all types of weather—heat, cold, rain, mud—and keeps them rolling with absolute minimum maintenance and servicing down time.

It will pay you to contact your grease supplier for lithium base, multi-purpose grease.

We will be glad to send you a copy of "Front Wheel Bearing Lubrication," an N.L.G.I. report.



LITHIUM HYDROXIDE
FOR INDUSTRY

FOOTE MINERAL COMPANY

445 Eighteen W. Chelton Bldg., Phila. 44, Pa.

RESEARCH LABORATORIES: Berwyn, Pa.

PLANTS: Exton, Pa.; Kings Mountain, N.C.; Sunbright, Va.

Ford Ups Horsepower

Continued from Page 134

wraparound windshield, a hooded roof outline over the windshield, and a re-styled one-piece grille. In addition, Ford offers an optional "driverized" custom cab, which provides extra comfort and reduces driver fatigue.

In the custom cab, there is five inches of foam rubber in the seat and three inches of foam rubber in the seat back. For seat backs, a stylish two-tone upholstery combination is offered, with a vinyl bolster for longer wear. Woven plastic seat upholstery outwears fabric, but air can pass through it, so it is comfortable in hot weather.

An optional wraparound rear window is available for greater rearward visibility.

Perforated headlining on the cab roof is backed by glass wool insulation, and sound deadener is applied on the floor and rear panels of custom cabs to keep out road noises.

12-Volt System

A standard 12-volt electrical system provides better ignition performance, higher generator output and faster cranking speeds.

Power steering will be available this year as an option on conventional heavy trucks. It is standard equipment on tandem models with 302 and 332-cu in. engines. Fordomatic transmission is available this year on P-500 parcel delivery trucks, extending this work saver further up the range of weight classifications.

END

Please Resume Reading Page 96

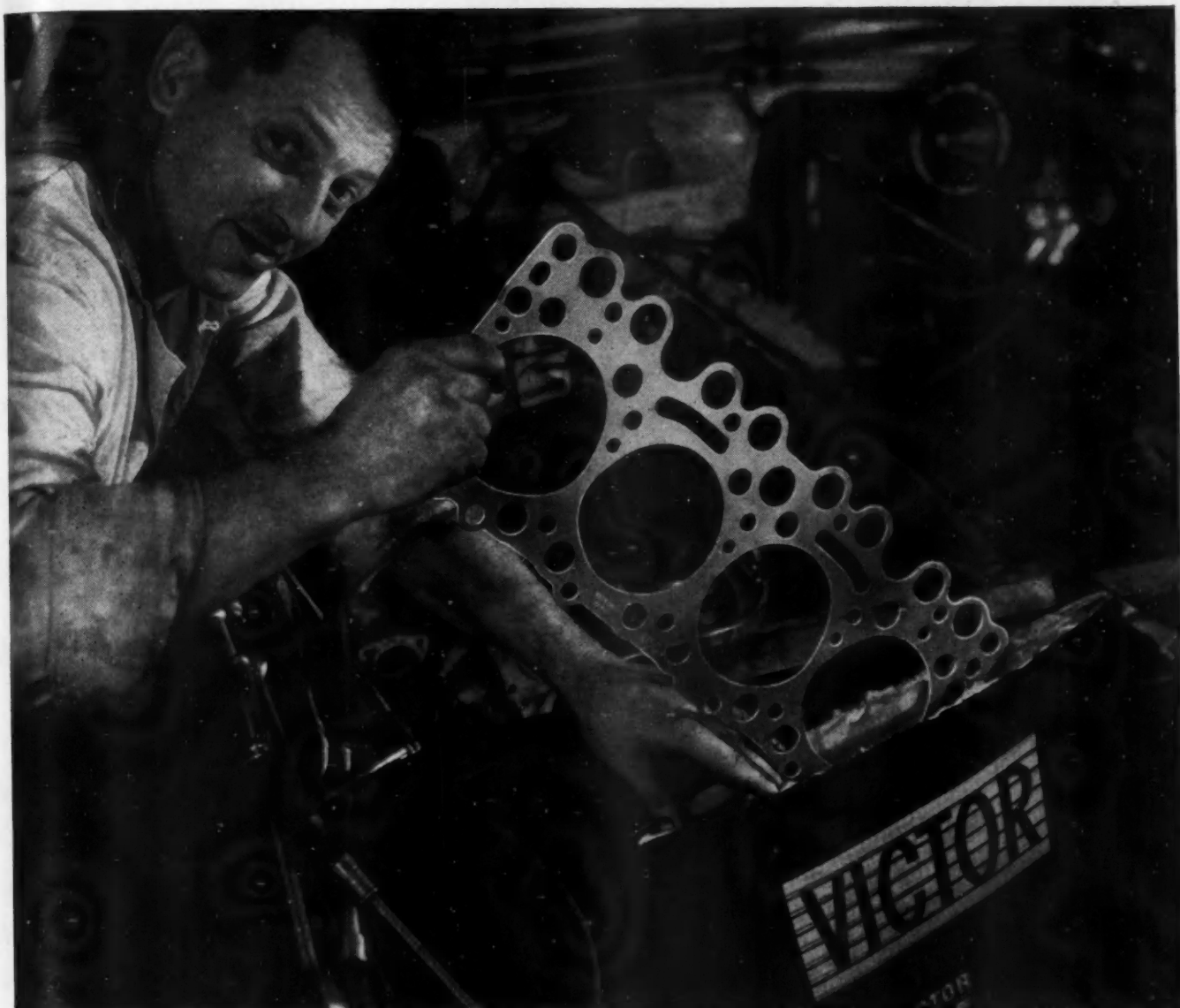


You know that statue of Venus in front of City Hall?"

COMMERCIAL CAR JOURNAL, October, 1955

VICTOR

GASKETS • OIL SEALS • PACKINGS



Getting gaskets is never a problem when you depend on your Victor Jobber

You never catch yourself worrying about getting replacement gaskets when you depend on Victor. Your Victor jobber always comes through with exactly the numbers you need—individual parts or packaged sets—for any make or model in your shop.

And you needn't worry over getting a good tight seal with Victor gaskets. They're original equipment quality in every detail—precision engineered to factory specifications or better—never less.

On gaskets as on oil seals your Victor Jobber serves you with the 100% complete replacement line for cars, trucks, tractors and stationary engines. He's equipped with the best catalog service—the famous Victor Gasket and Oil Seal

Guides—to fill your order correctly. He keeps up his stock in balance with your needs. He's in business to help your business.

Victor Mfg. & Gasket Co., P.O. Box 1333, Chicago 90, Ill.

VICTOR

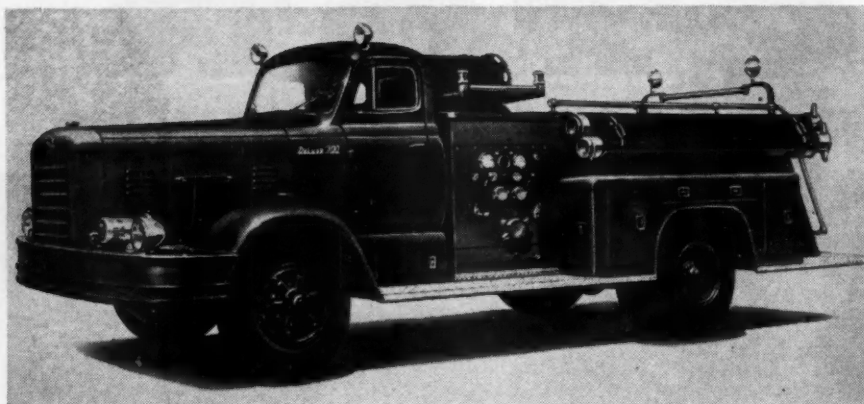
Sealing Products **EXCLUSIVELY**



The 100% Complete Line . . . Sold Through Leading Jobbers Everywhere

COMMERCIAL CAR JOURNAL, October, 1955

137



FWD Offers 6x4 Tractor

Continued from Page 82

Standard engine is the RD-501 gasoline powerplant. But the tractor is available with GMC 471, Cummins JT-6B, or Cummins NHB diesel engine. The RD-501 engine produces 212 hp at 3000 rpm and 444 lb ft torque at 1600 rpm. Transmission is a Road Ranger 8-speed Model R-46.

Accessibility

The manifold and exhaust are immediately behind the engine at the right side of the cab. Clutch and transmission are behind the cab and the battery box back of the right front fender, giving easy working access to all components.

Step gas tanks located one on each side of the chassis, behind the cab, make it easy to reach the air lines that connect trailer and tractor.

The FWD one-man-cab unit has a rear tandem on 48-in. centers with rubber-mounted aluminum suspension, the same type used on the FWD 6x4 Model No. T-647 conventional cab tractor developed earlier this year. FWD's transport series also includes a 4x4 Model No. T-47 with conventional cab. Frame design utilizes heat-treated alloy steel to obtain greater strength with less weight.

Fire Engines

New fire engines (above, left) include four basic deluxe series, F-500, F-700, F-1000, and F-1200. Standard engine in the first three series develops 226 hp and in the last series 240 hp. All have two-stage, series-parallel centrifugal pumps as basic equipment, ranging from a 500-gpm pump in the F-500 Series to 750 gpm in F-700, 1000 gpm in F-1000, and 1250 gpm in F-1200. Various engines, gear ratios, and pump options are available in each series.

New front end styling allows better arrangement of bell and siren. Body has larger side compartments and an extra compartment under the right-hand cab skirt. Body ca-

(TURN TO PAGE 142, PLEASE)

Looking for a Way to Reduce Driving and Accident Costs?

Wouldn't you like to reduce the frequency of accidents—make your drivers more appreciative of your problems and their jobs—have them think and act in terms of good public relations—and increase the productivity of driver-salesmen?

That sounds like a big order. But you can fill it . . . with no added effort on your part and for only 40¢ to 50¢ per driver per month!

How? . . . by subscribing to "The Drivers' Digest" and having it mailed to your drivers' homes.

This interesting, pocket-sized publication is edited exclusively for men who drive for a living. And it is now available in three editions to fit the specific interest of your drivers:

GREEN EDITION — for 'over-the-road' and city drivers

RED EDITION — for route salesmen

BLUE EDITION — for bus drivers

Beautifully printed in 2 colors each edition is "livened up" with cartoons, anecdotes and news about drivers. And all articles are designed to generate a mutual respect for both owners and drivers. You'll find that "The Drivers' Digest" pays you big dividends in happier employees, better safety records, greater job interest and lower maintenance costs.

Best of all, you can try "The Drivers' Digest" on a **MONEY-BACK GUARANTEE**. Send the coupon today for quantity prices and sample copy.



"THE DRIVERS' DIGEST"

Box 472 — Depot Square, Englewood, N. J.

Please send me further information and sample copies of "The Drivers' Digest" without obligation.

☐ "GREEN" EDITION ☐ "RED" EDITION ☐ "BLUE" EDITION

Name _____

Company _____

Address _____

City _____

Zone _____

State _____



PEDRICK FORMFLEX Chrome Ring Sets

- ✓ Restore engine power
 - ✓ Stop fuel and oil waste
 - ✓ Cut costly downtime
- with a minimum of labor and parts*

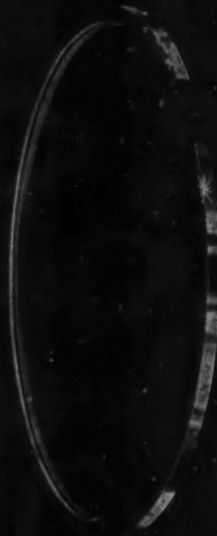
Many expensive, time-consuming engine overhauls can be avoided by using Pedrick Formflex Chrome Ring Sets. Thanks to the exclusive "Equalizer," a Formflex Chrome ring job can put any engine back in very satisfactory operating condition . . . at a minimum cost. The "Equalizer" provides a soft but positive and uniform pressure *all around the cylinder wall* . . . assuring maximum ring conformability and a positive seal in any engine.

A Pedrick Formflex Chrome ring job delivers longer life, more operating miles between re-ringing, better performance—all with a minimum of labor and parts. And your downtime is kept down!

WILKENING MANUFACTURING CO. • PHILADELPHIA 42
In Canada: Wilkening Manufacturing Co. (Canada) Ltd., Toronto

PEDRICK *Precisioneered* Chrome Top Rings

Here's the compression ring that is specially made for heavy duty. The solid chrome plating resists heat, eliminates the danger of scuffing, lasts up to 4 times longer. And the centrifugally-cast special alloy just won't break even in the most severe service. This is the top ring in all Pedrick Formflex Chrome Sets for heavy-duty service.



INSIST ON

Pedrick

FOR THE RIGHT RING JOB.

Before you buy HEATERS for your FLEET



—find out about
HaDees

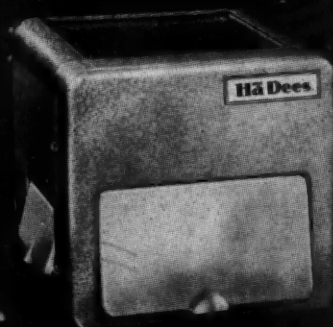
there is an easy-
to-install model for every
need—or, HaDees will
engineer units to your
specifications and assure
satisfactory performance.



they'll give you
MORE heat



—and **SAVE YOU
MONEY, TOO.**



For Example:

Model H-555, designed for easy installation, distributes heat throughout entire cab by three individually adjustable controls. Guarantees a reserve of heating power that assures pleasant driving in any weather.

WRITE FOR DETAILS ABOUT THE

Hottest Heater Deal

HADEES HEATERS

HaDees Heater Division of The Gabriel Company, Rockford, Illinois

FWD Offers 6x4 Tractor

Continued from Page 138

capacity is 2000 ft of 2½-in. double jacket hose.

Power proportioning center differential, standard on the FWD deluxe series, distributes engine torque one-third to front axle and two-thirds to rear.

The 500 Series is available not only in the basic F-522 model with standard 226-hp engine and 500 gpm pumper but in the F-524 with 240-hp engine and the F-526 with 260-hp engine. All three 500 Series models also may be obtained with three-stage, high-pressure, series-parallel centrifugal pump. Similar engine horsepower and high-pressure pump options are available in the deluxe 700 Series with 750 gpm pumps.

Deluxe 1000 Series pumpers include the basic F-1022 model plus the F-1024, F-1026, and FZ-1027, all featuring 1000 gpm pumps but with engine horsepowers of 226, 240, 260, and 275, respectively. Deluxe 1200 Series pumpers—basic model F-1224, F-1226, and FZ-1227—are equipped with 1250 gpm pumps and have engine capacities of 240, 260, and 275-hp.

All of the new FWD deluxe series pumper engines meet the basic requirements of Underwriters Bulletin No. 19. They are available with coupe-type or semi-open type cab, both with one-piece safety glass windshield and extra-wide, spacious design.

END

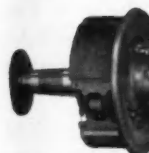
Please Resume Reading Page 83



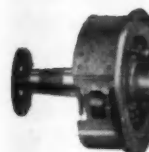
"Whoever it is, stop pinching!"

COMMERCIAL CAR JOURNAL, October, 1955

E a F in



SINGLE-REDUCER
AXLES



DOUBLE-REDUCER
AXLES



2-SPEED AXLES

This rugged
also used for
axles. The

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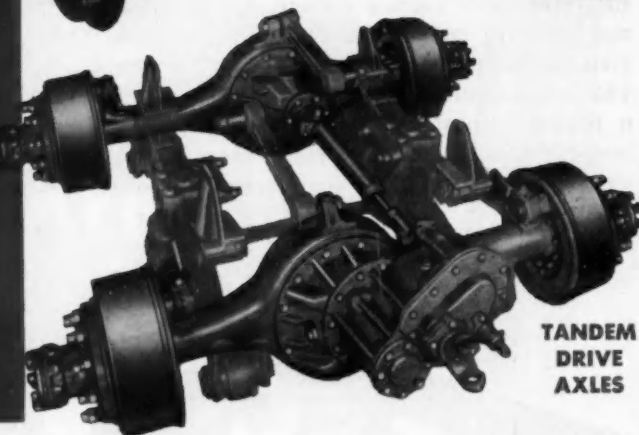
EATON PRO
Engine Parts
Springtites • S

COMMERCIAL C

EATON is a Famous Name in Motor Truck Axles



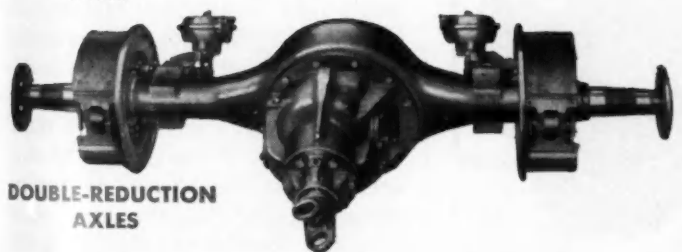
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AXLES



TANDEM
DRIVE
AXLES



SINGLE-REDUCTION
AXLES



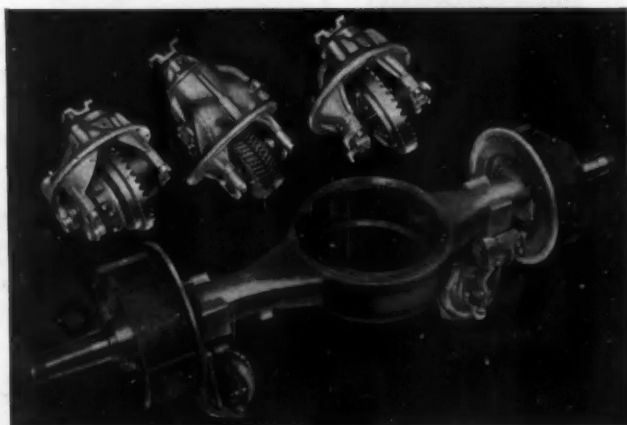
DOUBLE-REDUCTION
AXLES



2-SPEED AXLES

This rugged housing, used in famous Eaton 2-Speeds, is also used for Eaton single-reduction and double-reduction axles. The three types of heads are interchangeable.

EATON experience and engineering know-how are reflected in the outstanding performance records, minimum hauling costs, and long life of more than two million motor trucks. As a pioneer motor truck axle manufacturer, Eaton's aggressive engineering has been responsible for a number of fundamental advancements in axle design and production — particularly in the field of 2-Speed axles and tandem drive units.



EATON

AXLE DIVISION
MANUFACTURING COMPANY
CLEVELAND, OHIO

PRODUCTS: Sodium Cooled, Poppet, and Free Valves * Tappets * Hydraulic Valve Lifters * Valve Seat Inserts * Jet Engine Parts * Rotor Pumps * Motor Truck Axles * Permanent Mold Gray Iron Castings * Heater-Defroster Units * Snap Rings * Springtites * Spring Washers * Cold Drawn Steel * Stampings * Leaf and Coil Springs * Dynamatic Drives, Brakes, Dynamometers

Keep the Cooling System Clean

Continued from Page 77

lished that devices extraneous to the coolant, or cooling system, are not effective in preventing corrosion of this nature. Effective prevention is found only in the use of a properly inhibited coolant in a leak-tight system. Summer time water inhibitors are of two general

types: Chemicals, which are dissolved in the coolant and should impart a buffering action to the coolant. Soluble oils, more precisely described as "emulsifiable oils," which should form a protective film on the interior surfaces of the cooling system.



*Talk about sailors wives
on stormy nights . . .*



. . . they have nothing on fleet operators waiting out not only his men and equipment but also his loads, liabilities and delivery schedules.

Now is the time to prevent sleepless nights, stomach ulcers and to reduce high financial risks, by making certain each vehicle starts the winter with a set of good properly fitting tire chains.

For extra safety features, easy installations and long wear, standardize on WESCO TIRE CHAINS. There are no better tire chains made.

Write for Catalog Sheets

WESTERN CHAIN COMPANY

1801 BELMONT AVENUE • CHICAGO 13, ILLINOIS

Choose Inhibitors Carefully

In order to obtain desirable performance of these materials in the cooling system, certain precautions should be observed in their selection and application. For example, proper formulation of a chemical inhibitor is required to give all-around protection to the various metals exposed to the coolant. Since there are many types of "soluble" oils available having various purposes and different performance characteristics, it is important that the material selected will provide adequate rust inhibition and be compatible in the system. Excessive concentrations of "soluble" oil in the cooling system may promote foaming, rubber hose deterioration and agglomeration resulting in actual clogging of the system.

In the event that these qualities cannot be predetermined, it may prove better to use an inhibitor compound prepared by a reputable manufacturer.

Reputable brands of anti-freeze are formulated with inhibitors by the manufacturers. Therefore, no additional inhibitors should be added. Reinhibition, or extended use of used anti-freeze is a doubtful practice which in the long run frequently costs more than a regular schedule of draining and discarding used solutions. Under no circumstances can the used solution be restored to full strength

(TURN TO PAGE 148, PLEASE)



"It belongs to that plastic squeeze bottle company. You can load twice as much!"

Bett



Bro



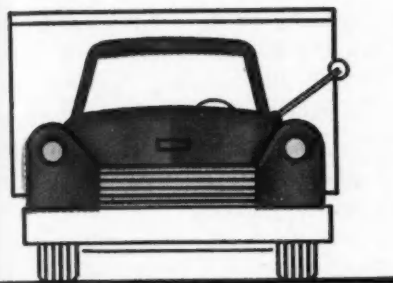
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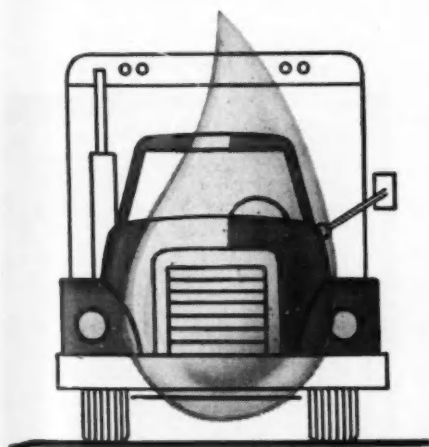
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COMMERCIAL

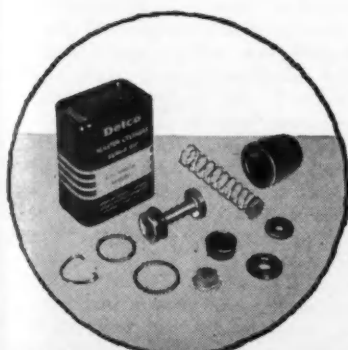
Better



Brake Fluid



Conditions



MASTER CYLINDER REPAIR KIT
Contains every part necessary to put a master cylinder back in normal operating condition.

Cars, trucks and buses stop better—stop faster—in heavy traffic or light, with Delco Super 11 heavy-duty brake fluid in the brake systems. Delco Super 11 exceeds U. S. Government specification VV-F-451a. It also exceeds SAE specification 70R1, which establishes performance standards for heavy-duty brake fluid, including operating temperature ranges, lubrication, stability, corrosive effect on metals and rubber. There's a big pre-sold market for Delco Super 11, too—it's factory-installed in many vehicles, including all General Motors cars and trucks. You can order Delco Super 11 and Delco Super 9—the moderate-duty brake fluid that exceeds SAE specification 70R2—from your United Motors distributor. Both are available in any convenient quantity, from 8-ounce cans to 54-gallon drums.



moraine products

DIVISION OF GENERAL MOTORS, DAYTON, OHIO

Keep Cooling System Clean

Continued from Page 144

corrosion protection. Further, there is the risk of inhibitor incompatibility between the additive and original formula. Foaming, precipitation, or further loss of corrosion protection could result. In other words, don't play "medicine man" with the cooling system. The results of such practice are

completely unpredictable and, over a period of time, may do more harm than good.

As we have stated previously, the other most troublesome problem is leakage, both external and internal.

Keep the System Tight

Service investigation summaries have revealed that the cylinder head joint is the chief source of leakage troubles in the cooling system. This is understandable if

we realize that this area must contain combustion pressures as high as 700 psi and gas temperatures in the range of 4500 deg. F. On the other side of the seal, coolant must be contained with as high as 20 water ports passing the coolant through the cylinder head gasket.

In this area we must consider exhaust gas leakage as well as coolant leakage. Exhaust gas leakage from the combustion chamber into the cooling system causes coolant overflow and promotes rapid inhibitor deterioration—here we see another cause of rusty water jackets.

In addition, exhaust leakage past the cylinder head gasket causes erosion at the surface which frequently introduces coolant leakage into the cylinders.

In order to withstand increased
(TURN TO PAGE 150, PLEASE)

ANNOUNCING A FEW OF THE NEW HANSEN PRODUCTS



1
POINT

1-POINT LOCK and FLUSH HANDLE. Locks door at ONE point—center. Locking Latch, 1" wide, attached to Flush Handle. Latch lifts or lowers by turning operating handle. Lock No. 101-S — 3 3/4" I.D., 4 7/8" O.D., 1/2" deep. 101-L — 4 1/2" I.D., 6" O.D., 1/2" deep.

for door
CENTERS



2
POINT

2-POINT LOCK and FLUSH HANDLE. Locks door at TWO points—top and bottom. Lock fitted with two rods, 30" long, with rod guides and springs. Rods cut to length to suit door height. Lock No. 102-S; FLUSH HANDLE, 4 7/8" O.D., 102-L, 6" O.D.

TOP and
BOTTOM
of doors



3
POINT

3-POINT LOCK and FLUSH HANDLE. Locks door at THREE points—center, top and bottom. Locks at center by latch; at top and bottom by ends of rods. Lock complete includes two 30" rods and Flush Handle with Latch 1" wide. Lock No. 103-S; FLUSH HANDLE, 4 7/8" O.D., 103-L, 6" O.D.

TOP
CENTER
and
BOTTOM

REQUEST
COMPLETE
DETAILS

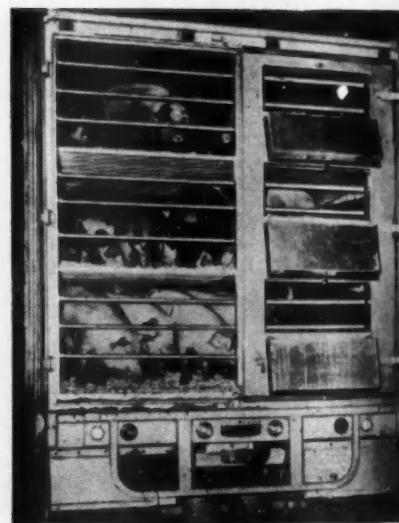
A. L. HANSEN MFG. CO.

5047 RAVENSWOOD AVE.

CHICAGO 40, ILL.



Triple-Decked Hogs



Top quality hogs are hauled from Omaha, Nebr. to cities on the West Coast in this Fruehauf "Volume Van" semi-trailer with special refrigerated and air-conditioning unit and triple decks. It was designed by Harry Campbell and Sons in conjunction with the Service Dept., Omaha Branch, Fruehauf Trailer Co. and Sterling Refrigeration & Engineering Co., also of Omaha. Two trailers of this type are in operation at present. Purpose of these trailers is for live hog haul to West Coast and capable of handling perishable and frozen products on the return trip. Special features include: special insulation in the trailer itself, smooth aluminum lining throughout interior, special vent doors front and rear, two deck rails and aluminum decks on the interior.

full capacity service

with Crown Jewel Endurance

Filko Crown Jewel Switches meet fully the heaviest service challenge of enduring full capacity performance in heavy duty commercial applications! Generous utilization of advanced metalurgical developments assures maximum areas of contact for full current flow... lasting perfection of mechanical operation.

Guided by skilled Filko craftsmen, precision production tools create, form and seal each unit to Filko standards matched to punishing heavy service demands

Thus, the name FILKO is assurance of replacement switches unique in their immediate dynamic response... unfailing in full capacity performance... rich in meticulous attention to detail that makes each...

*more than a replacement part
... a true improvement
in ignition*



FILKO

F. & B. Mfg. Co.
4248 W. Chicago Ave.
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Warehouses in:
Los Angeles, Oakland,
Miami, Fort Worth,
New York, Boston,
Cleveland, Atlanta,
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*"the Crown Jewels
of Ignition"*

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ber, 1955

Keep Cooling System Clean

Continued from Page 148

combustion pressures and temperatures, cylinder head gaskets are in general being made thinner and harder. This means that the material is less embeddable and less conformable—which results in less tolerance for surface deficiencies and foreign material at the cylinder head joint area. More simply,

stated, the overall situation demands higher standards of installation and tightening procedures. Stop leaks cannot be depended upon to eliminate leakage at the cylinder head joint. Correct mechanical conditions are the only assurance of trouble free operation.

There is a great deal of misconception surrounding the nature and cause of coolant leakage—particularly regarding ethylene glycol base and anti-freezes.

Due to the non-evaporative characteristics and dye content, glycol solutions will remain apparent at points of leakage. Water or alcohol solutions rapidly evaporate, leaving little or no trace of moisture. Therefore, it is understandable that service personnel can easily gain an erroneous conception. Actually, properly inhibited glycol anti-freezes have no greater tendency to leak than plain water. Under steady-state conditions, their rate of leakage is appreciably less than water or alcohol solutions.

Fundamentally, leakage is due to a hole in the cooling system. It is important that the service man's thinking be set straight on this fact. Otherwise he cannot effectively approach the service problem of correcting the leak.

In answer to the requirement of a basic approach to problems which we have just discussed, your preventive maintenance program could well be based upon rigid and regular inspection of the three sensitive indicators, easily available to the driver and service man: 1. Coolant level, 2. Coolant temperature, 3. Coolant condition.

Any variation from the established normal of these conditions is a warning of serious trouble ahead. Immediate preventive correction can save a lot of costly repair, replacement and down time. Remember—cooling system care really pays.

END

Please Resume Reading Page 78

HOW where will they stop this winter?

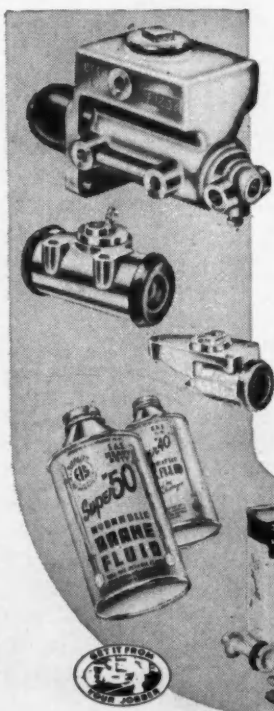


MAKE SURE YOU SERVICE

WITH



BRAKE PARTS



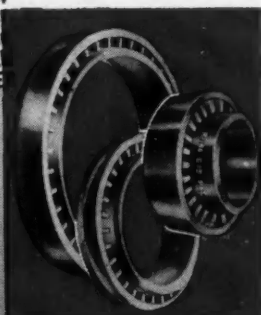
There's more to winterizing than antifreeze and skid chains! It's just as important (and mighty profitable) to "pull a wheel"—to check master and wheel cylinders for leaks and to check the brake fluid level!

Your EIS Distributor has the brake parts you need for the winter changeover business ahead—including practically all of the 1955 parts. Most EIS Master Cylinders are now equipped with the famous EIS Ribbed Cups. Wheel Cylinders using chevron cups and single end cylinders also come with Ribbed Cups. Most EIS Kits contain these Ribbed Cups, too. Insist on getting them—they eliminate troubles and comebacks!

EIS AUTOMOTIVE CORP., Middletown, Conn.

Write for catalog

CURE YOUR WHEEL CYLINDER TROUBLES ON INTERNATIONAL, FORD, CHEVROLET, GMC and other trucks with the time-tested and proven EIS Ribbed Cup! PROVE BEST FOR 10 YEARS ON CHRYSLER PRODUCTS CYLINDERS!



"All I know is that the Navy wanted it shipped from New York to San Francisco by the fastest way possible!"

WHEN a pany's p without a sing well expect th The happy cu Courtaldis Can ducer which "award of fa man Transfer tract carrier Courtaldis' pro Ont., and Mon quarter centur To achieve pended on ca vehicle maint and effective

Driver Relo Trailers ar rayon at Cor

40-T



This new dump truck Model No. 80 largest two-ax built today Motor Truck Engineered for ing jobs in op or rock movin ity struck of (2 to 1) is 2 rating of 150,0 with body is measures 12 f and is 14 ft one-man cab s a single diesel between 300 on the grade Turning radiu ing angle of capacity is 50 I-beam center itself, weighs 5 capacity rear wheel bearing

COMMERCIAL C.

No Mishaps in 25 Years Gains Customer's Praise

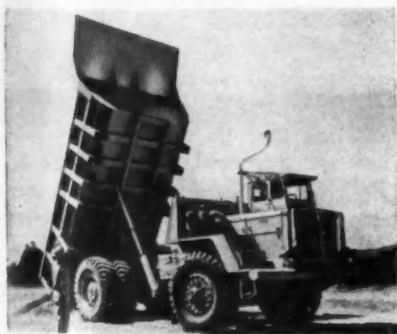
WHEN a fleet can carry a company's products for 25 years without a single accident, you might well expect the customer to be happy. The happy customer in this case is Courtalds Canada Ltd., a rayon producer which recently presented an "award of faithful service" to Norman Transfer Ltd., a Canadian contract carrier which has been moving Courtalds' products between Cornwall, Ont., and Montreal, Que., for the past quarter century.

To achieve the record, the fleet depended on careful planning, efficient vehicle maintenance, driver training, and effective scheduling.

Driver Relay

Trailers are loaded with rolls of rayon at Cornwall, sealed, and are

40-Ton Kenworth



This new 40-ton, spring-mounted dump truck known as the Kenworth Model No. 803 is thought to be the largest two-axle dump truck being built today according to Kenworth Motor Truck Corp., Seattle, Wash. Engineered for big off-highway hauling jobs in open pit mining and earth or rock moving, it has a body capacity truck of 24 cu yd. Heaped load (2 to 1) is 28 cu yd. With a GVW rating of 150,000 lb, the chassis weight with body is 68,000 lb. The vehicle measures 12 ft across the front hubs, and is 14 ft off the ground over the one-man cab shield. It is powered by a single diesel engine, which will vary between 300 and 500 hp depending on the grades of the loaded haul. Turning radius is 36½ ft, with a turning angle of 30 deg. The front axle capacity is 50,000 lb, with an 8-in I-beam center section. The front axle, itself, weighs 5466 lb. The 100,000-lb capacity rear axle is designed for wheel bearings of an 8-in. bore.

shipped in a shuttle service from there to Montreal. To prevent driver fatigue, at the half-way mark between the mill at Cornwall and the destination there is a change of tractors and drivers.

This means that drivers need drive no more than three hours without a break. The trucking company feels that this system is one of the most important factors behind its safety record.

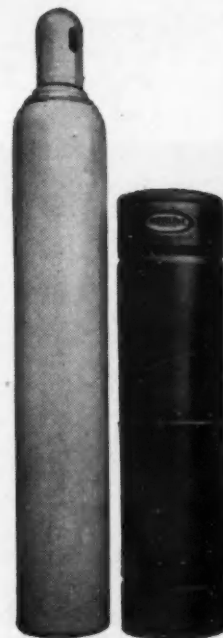
Driver Responsibility

Norman Transfer believes in developing driver responsibility for their tractors. For this reason, each driver is assigned to a specific tractor, and drives it as long as it is in active service. Even during maintenance pe-

(TURN TO NEXT PAGE, PLEASE)

DEMURRAGE PROBLEMS?

THESE LEASE CYLINDERS
MAY BE THE ANSWER



• AVOID DEMURRAGE CHARGES

If regular loan cylinders last you longer than 30 days, you can avoid demurrage charges with these lease cylinders.

• CHOICE OF CYLINDER SIZES

Two sizes each of oxygen and acetylene cylinders are available under lease agreement.

• STEADY SUPPLY ASSURED

Stocks of full cylinders are maintained in even exchange for your empties. You pay only for gas. No waiting for cylinders to be filled.

• NO MAINTENANCE OR REPAIR COSTS

LINDE maintains your lease cylinders against normal wear and tear and retests them periodically at no cost to you.

• ASK FOR FULL DETAILS TODAY

Let your LINDE distributor show you how much you can save by leasing oxygen and acetylene cylinders. Or write for further information. LINDE AIR PRODUCTS COMPANY, a Division of Union Carbide and Carbon Corporation, 30 E. 42nd St., New York 17, N. Y. In Canada: Union Carbide Canada Limited, Toronto.

Cylinder	Style	Capacity, cu. ft.	Height, in.	Diameter, in.	Weight	
					Full lb.	Empty lb.
Oxygen	Q*	80	35	7½	70	65
	S	150	51	7¾	92	80
Acetylene	WQ	60	24¼	7¾	55	51
	WS	133	35½	8½	78	69

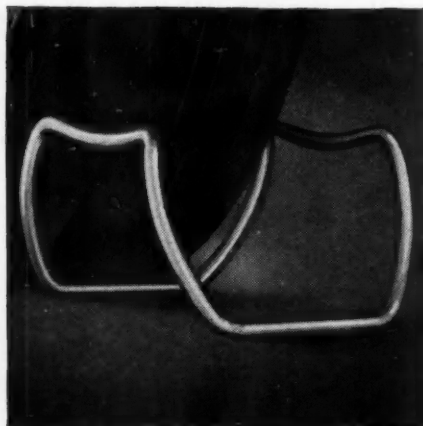
*In some areas, Style XL, 70 cu. ft.

GET IT FROM YOUR **LINDE** DISTRIBUTOR

The term "Linde" is a registered trade-mark of Union Carbide and Carbon Corporation

CAMPBELL CHAINS

Foul-weather Friends!



"TRACTION KLIPS" for Emergencies

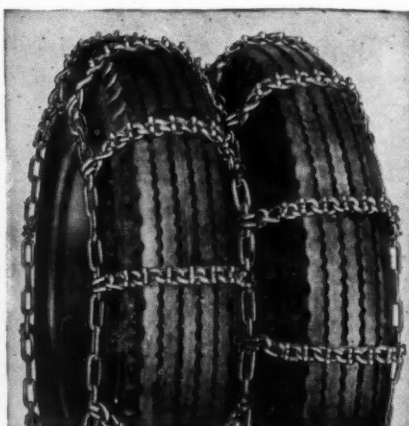
Just tuck a "Klip" under each rear wheel. Roll on—and out of trouble! Campbell "Traction Klips" get you out of ruts, up slippery hills, away from icy gutters. And, even if your wheels are spinning, the "Klips" will be picked up instantly. Handy remover-tool gets "Klips" off in seconds. For emergency use on passenger cars, taxis, light trucks.



Tested and Certified by
Motor Vehicle Research, Inc.

"KWIK-ON" TIRE CHAINS—ON THE WHEEL IN LESS THAN A MINUTE

Complete chains for continuous use—yet on in just a minute a wheel! No need to jack up or move vehicle. When time means money—here's the quick, easy way to keep your fleet on the move in any weather! *Lug-Reinforced* or Regular cross chains.



TRUCK AND BUS CHAINS in Three Grades

Protect your profits and your drivers from the hazards of winter weather. Campbell Truck and Bus Chains are available in every size . . . for every type of service. *Lug-Reinforced* for maximum traction and wear—*Highway Service* for general use—*Mud Service* for off-the-road use. Color-coded bags save handling time—make identification easy. Ask your jobber to recommend the correct Campbell Chain for the job. If you prefer, write direct.

CAMPBELL CHAIN Company

MAIN OFFICE, YORK, PA.

West Burlington, Iowa; Portland, Oregon; Sacramento, Calif.

Chain for every need . . . industrial . . . marine . . . farm . . . automotive

No Mishaps in 25 Years

Continued from Page 153

riods, drivers stay with their units, and supervise the work being done on them, in cooperation with the garage superintendent.

Drivers are responsible for daily inspections of their units and develop a pride of "ownership." Company officials are pleased with the care which drivers have shown in keeping their vehicles in good operating condition, and claim that since this system has been in use it has helped reduce maintenance costs by some 45 per cent.

Careful Maintenance

Every vehicle in this 165-vehicle fleet is given a complete daily inspection. Engines are checked carefully; oil, pumps, fan belts, etc., come in for a close checkup. Tractor and trailer lubrications and oil changes are at weekly intervals. After 50,000 miles the tractors go in for complete overhauls in the company's well-equipped shop.

The route between Cornwall and Montreal is one of Canada's most treacherous, winding for miles along the side of a wide canal. Weather in eastern Canada is rugged in winter, and all tractors are equipped with electric sanders for added safety when operating through snow and ice. Engines are governed at 35-40 mph.

Despite the tough route which they drive, Norman Transport Ltd. drivers find other factors compensate for it and stay with the company. Many drivers have been with the company for from 10 to 20 years, and driver turn-over is relatively low.



"I thought you'd like to know that my rig has lug nuts of three type threads—right, left and stripped!"

COMMERCIAL CAR JOURNAL, October, 1955



Gauges
you need for
better air service

Schrader
3332 Type
Airline Filter
protects valuable
equipment



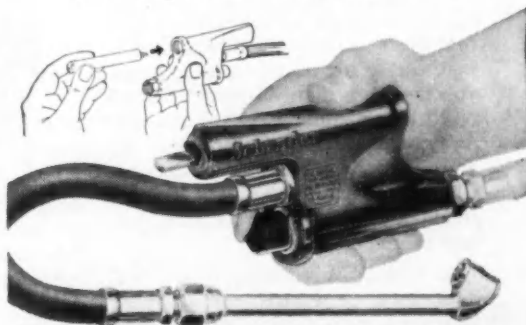
Install one at each major
pipe outlet—protect rubber
tires from oil in airlines;
filter rust scale, moisture.
Save valuable air tools,
tires, equipment.

Save downtime loss... use accurate Schrader gauging equipment

Start with an 8106B Trutest Special Gauge to certify gauging equipment, gauges and airlines. The 7188BH or 2095L is the all-purpose service gauge you can use on big truck duals! The 7750T Pencil Type or 5050A gauge is your air dipstick—use it that way and keep one in each vehicle to catch unbalanced inflation on the spot. And for modernizing your airlines take a look at the new #3650 Chuck Gauge... and the #3332 type Airline filters.

Your Schrader Supplier has all these genuine, quality products—order from him today.

New! Schrader Chuck Gauge #3650
with replaceable gauge unit.



Modernize airlines, get this sturdy, practical gauge.

Schrader®

ESTABLISHED IN 1844

A. SCHRADER'S SON, Division of Scovill Manufacturing Company, Incorporated
470 Vanderbilt Avenue, Brooklyn 38, N. Y.

FIRST NAME IN TIRE VALVES

FOR ORIGINAL EQUIPMENT AND REPLACEMENT

What's Inside, What's Outside in P U & D?

TWO New York judges can't agree on what is the inside of a building. And this knotty problem is important to truck operators because most tariff schedules provide for one rate if a pick up or delivery is inside the build-

ing and another if it is made from a platform or loading dock.

The case that has gotten the judges arguing involves the Federal Transportation Line and Sears Roebuck's Rochester, N. Y. warehouse.

The Sear's warehouse is typical of thousands—a one story building with a loading platform running along one side. Inside it is divided into two rooms and an office. One is a large storage room and the other a smaller shipping room that extends the length of the warehouse behind the loading platform. The doors between the platform and the shipping room are the usual overhead doors that roll up when open.

Through a Door . . .

Over the years Federal and other carriers have been backing up to the truck platform and wheeling the load out on hand carts onto the platform and into the truck. They have been charging Sears the basic rate for picking up from a platform.

So someone decided that if you have to go through a door you are inside a building, and therefore can charge for pick-up service from the interior of a building. Sear's refused to pay the higher rate and Federal sued.

. . . Is Inside

Most of the judges agreed that this was inside a building and Federal won. Henceforth the inside rate will apply if the load has to be moved through a door to load it. The judges solemnly decided that the interior of a building is inside and if you have to haul the cargo through a door you should get paid extra for it, and in New York will.

Some of the judges couldn't see it that way. They said that nobody had charged for that before, that a shipping room is really part of the loading platform only sheltered a little and closed so that it can be locked. A wall between it and the outside platform doesn't make it any harder to load.

They thought that the extra charge should apply only if the load was in the basement or on the second floor or in some distant part of a building. To them, inside meant inaccessible and a one story street level warehouse with all parts easily reached from the outside would be counted as outside for tariff purposes.

TRAVELLING FREIGHT AUDITOR:
"WAIT A MINUTE! I THINK I HEARD SOMETHING BREAK."

LUSCIOUS LOVELY: "OH, FORGET IT. THAT WAS JUST MY PROMISE TO MOTHER."

COMMERCIAL CAR JOURNAL, October, 1955

DON'T LET YOUR TRUCKS

"LIVE DANGEROUSLY"

STEWART-WARNER *Universal Mounting* GAUGES

Can save you plenty!

Running a truck or bus with gauges that don't work or aren't accurate is just asking for trouble and can cost you far more than the slight cost of replacement gauges. Oil can drain away, coolant boil off, fuel run out, and countless other troubles threaten when a driver doesn't have the instruments that spot the trouble before it happens.

So, look for this display. You'll find it at your Stewart-Warner jobber, and it's a sure sign of dependable ammeters, oil gauges, fuel gauges—in fact, all the instruments to meet any automotive need. And every one

of them is built to Stewart-Warner standards of accuracy.

Stewart-Warner replacement gauges are heavy duty, with chrome bezels and rust proofed steel cases. Two sizes: 2" diameter, and 2 1/8". All mount through the front of the panel and have individual mounting brackets. Pressure and temperature warning switches for visible or audible signal also available. See your Stewart-Warner jobber.



STEWART-WARNER

Dept. DD-105, 1840 Diversey Parkway, Chicago 14, Ill.

DIVCO

SAVE
the wor

Space
Use you
cooled

REDU
ning (o

Sliding bulkhead do
Available set b
from, or flush with,
door posts. Optiona
models 334-374 and

COMMERCIAL C



Cool Profits WITH

DIVCO INSULATED AND REFRIGERATED TRUCKS

SAVE: Money — Eliminate the cost of ice and the work in handling it.

Space — Relieve dairy plant cold room space. Use your Divco for added storage space of pre-cooled milk as well as delivery.

REDUCE: Time — Pre-load in afternoon or evening (or whenever labor is more easily available)

for early morning start. No time lost in icing.

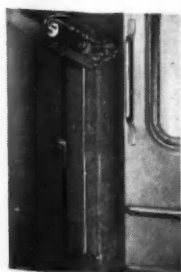
Overhead — Eliminate handling of returned milk. Save expensive body maintenance by eliminating ice and water in the truck body. Reduce corrosion!

ELIMINATE: Loss — Keep your milk in top condition. No spoilage.

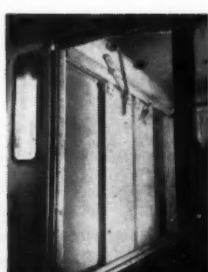
Messy Handling — Send your driver on his route with presentable appearance. No messy ice and water to handle or to ruin appearance of paper cartons.

INCREASE: Sales — Carry more cargo, longer. Lengthen your routes, make additional deliveries.

Market — Expand your line of perishables. Deliver cheese, eggs, butter, fruit juice, etc.



Sliding bulkhead doors. Available set back from, or flush with, side door posts. Optional on models 334-374 and 21.



Double action twin sliding doors at additional cost. Available set back from, or flush with side door posts. Manual or power operated. Models 334-374 and 21.



Sliding or jack-knife bulkhead doors. Available flush with side door posts only. Models 11-13 and 15 only. Jack-knife illustrated.



Dutch doors. Available set back from side door posts. Optional on models 334-374 and 21.

6 DIVCO ECONOMY-ENGINEERED INSULATED AND REFRIGERATED MODELS NOW IN REGULARLY SCHEDULED MONTHLY PRODUCTION. AVAILABLE WITH FREON OR AMMONIA REFRIGERATION SYSTEM.

DIVCO TRUCKS

DIVCO CORPORATION • DETROIT 5, MICHIGAN

OVER 80% OF ALL DIVCO TRUCKS PRODUCED SINCE 1927 ARE STILL IN SERVICE!

Techniques For Treating Burns Lessen Pain, Hasten Healing

FORTUNATELY medicine today knows better how to treat burns and scalds than in former times. Injuries caused by the contact of heat are called burns. If the burn is caused by a hot liquid or a hot, moist vapor, it is commonly called a scald.

Recently a case was reported when a young man was filling a tractor's gasoline tank when it became ignited by a cigarette.

The gasoline splashed on him, setting his clothing ablaze. Experience from extensive statistical figures shows

By Dr. W. Schweisheimer

that those who are burned over more than 50 per cent of their body, usually do not survive. This man, however, was burned severely over 71 per cent of his body.

Recognizing the apparent hopelessness of the case, Dr. James Whitelaw gave the injured man ACTH, the hormone of the pituitary gland that stimulates the adrenal gland to manufacture cortisone. Immediately after the use of the hormone the pain disappeared, the shock lessened and the burns began to heal. Skin grafts quickly "took" over the sites of the burns and new skin grew like magic. Dr. H. A. Rusk, who reported this case, has stated that a number of other burns have been treated since in the same way, also with good results.

Occupational Burns

MOST frequent sources of occupational burns and scalds are: (1) solid bodies such as heated metals, melted resins, pitch and other substances which solidify at once on contact with the skin, (2) liquids such as hot water and heated fats and oils which spread over the surface of the skin, (3) gases such as steam and hot air and, (4) flames from ignited materials such as wood, coal, petroleum, alcohol, gas; flames from welding lamp; explosive mixtures of inflammable gases.

Treatment of Burns

IF A shock has been combined with the burn, the best treatment is to keep the burn-sufferer warm (not hot), give him sweet drinks and reassure him of quick recovery. Remove clothing from the burned area. If the clothing sticks to the skin, cut around it—it's the doctor's job to remove the sticking parts.

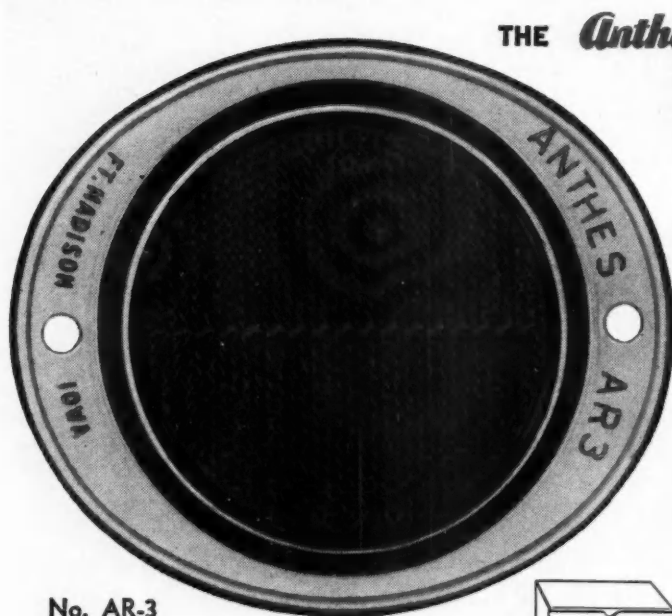
The use of narcotics to relieve pain will depend upon the presence of a doctor.

Experts recommend that for first measure, while the wound is still dry, the burn should be covered with ointment, petrolatum or burn ointment, and light bandages of gauze. Don't touch the wound nor the gauze which will cover the burn.

Surgeons clean the surrounding skin with soap and water and use compresses for one to two days, followed by sterile dry dressings. Cleansing eliminates bacteria on burnt surface and skin, and thus prevents infection.

However, intelligent first-aiders do not use such cleaning methods. All they do is prevent further harm by

(TURN TO PAGE 160, PLEASE)



No. AR-3

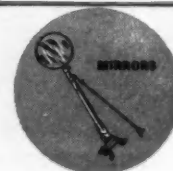
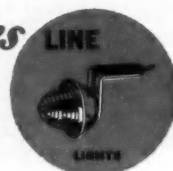
New Anthes BLAZER 3-Inch Aluminum Reflector

The aluminum frame for this unit is formed in one piece. This unique production feature permits Anthes to price this item very low. A new high standard of quality at lower price is also achieved in the Lucite lens (now made in the Anthes plant). The Blazer is a light weight, non-rusting—low priced—approved reflector that merits your immediate consideration. Now packed 25 to the carton, compact to store—convenient to use. Write for prices and sample order.

ANTHES FORCE OILER CO., FT. MADISON, IOWA

Anthes THE FIRST LINE OF SAFETY

... and proud to serve the safest
drivers on the road!





EATON

Free-Valves

LAST LONGER*

Free Floating Action—

- Wipes stem and seat free of deposits
- Keeps a film of oil on stem and guide surfaces
- Prevents scuffing
- Prevents burning and guttering
- Reduces wear
- Eliminates hot spots due to local leakage



Performance records covering engines of all types in all kinds of service prove that Eaton Free-Valves increase valve life many times over the ordinary life expectancy of conventional valves.

Eaton Free-Valves can be applied to engines of all types and sizes, without costly design changes. Our engineers will be glad to discuss Eaton Free-Valves with you.

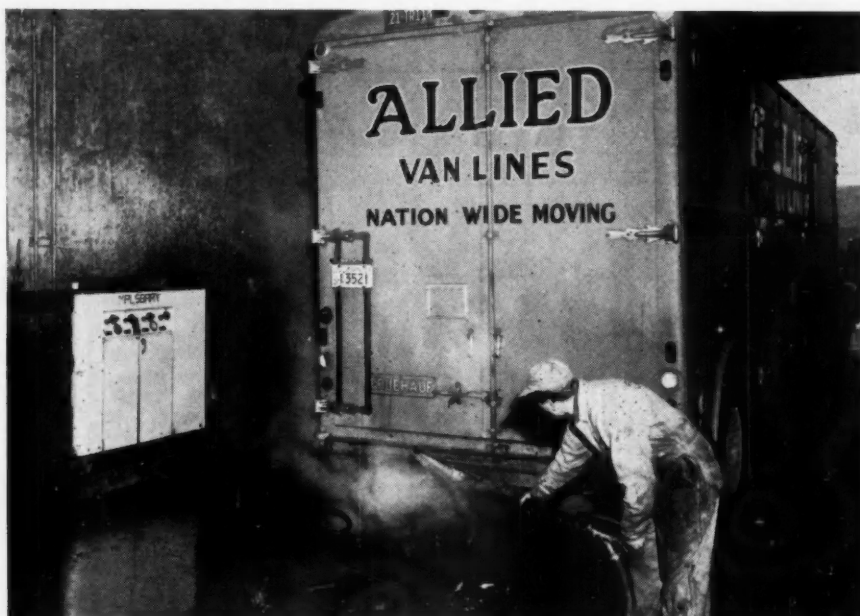


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VALVE DIVISION
MANUFACTURING COMPANY
9771 FRENCH ROAD • DETROIT 13, MICHIGAN
General Offices: CLEVELAND, OHIO



® PRODUCTS: Sodium Cooled, Poppet, and Free Valves • Tappets • Hydraulic Valve Lifters • Valve Seat Inserts • Jet Engine Parts • Rotor Pumps • Motor Truck Axles • Permanent Mold Gray Iron Castings • Heater Defroster Units • Snap Rings • Springlites • Spring Washers • Cold Drawn Steel • Stampings • Leaf and Coil Springs • Dynamatic Drives, Brakes, Dynamometers



In 45 minutes, MALS BARY 250 steam cleaner completely removes road oil and dirt from this van at Truck Town, Calgary. Cleaner is recessed in wall to save floor space and keep cleaning area clear for maneuvering trucks.

Does Steam Cleaning Pay?

Fleet Owners of MALS BARY HPC Cleaners Report:

Turn-around cut from 3 days to 6 hours — Converting a tanker from bunker oils to lighter fuels formerly took a Maryland trucker 3 days or more. Now the high pressures and quick degassing possible with a MALS BARY 250 cut that to 5 or 6 hours. Quick cleaning and degassing of a leaky tanker saved \$400 for this trucker on one repair job alone.

Cleaning time reduced 200%. — A New England hauler completely cleans a 2500-gal. trailer, covered with road dirt and peanut oil, in 1 hour. He steam cleans chassis and engines before overhauls, and tankers, both outside and in to get rid of odors and residues. His maintenance superintendent reports: Our MALS BARY steamers operate 18-20 hours daily and have cut tank cleaning time about 200% on a 300-unit fleet.

To handle tough cleaning and degassing jobs for large fleets, requires lots of water, real impact, and plenty of hot wet steam. You get all three in MALS BARY HPC cleaners.

HPC means high pressure combination — MALS BARY HPC cleaners use pumps

for pressure instead of steam. You have choice of cleaning with cold water, hot solution (steam), or hot rinse—combined with pressures to 400 p.s.i. These pressures literally explode water or steam (to 325°F) from the cleaning nozzle, blast away stubborn road oils and caked dirt other cleaners can't touch.

Low pressure wet steam from MALS BARY HPC cleaners adjusts to give you a maximum of steam (as high as 80% vapor to 20% water) for heating 4000-gal. tanks to 212°F. in as little as 10 minutes. No other steam cleaner can heat and degass tankers so fast.

Why settle for a halfway cleaner when a MALS BARY can handle all your cleaning needs? Try it. Ask your MALS BARY dealer to demonstrate on your job NOW...or write today for Catalog 150-R and application sheets.

57



Room K, 845-92nd Ave., Oakland 3, Calif.

Treating Burns . . .

Continued from Page 158

protecting the wound with clean gauze or, in an emergency, clean linen.

If you have to care for an extensively burned patient for some time before medical aid can be obtained, a considerable amount of water should be given for treatment of shock, preferably small amounts at frequent intervals.

Medical treatment of burns and scalds is much simpler than it used to be. These suggestions are now made for the local treatment of burns: (1) Surgical cleanliness to prevent infection, (2) Compression of the injured area to prevent fluid loss and (3) Rest to allow the tissue to heal in short time. Modern treatment uses a minimum of drugs on burns. Possible infection will be prevented or combated by penicillin.

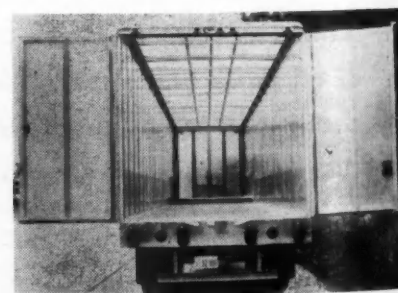
Three Degrees of Burns

BURNS usually are classified in three degrees. A first degree burn may cover a large area of reddened and unbroken skin. A second degree burn is similar to a condition due to a scald. Here the skin is blistered and broken. In a third degree burn the tissue is burned away to a certain depth.

Pain is relieved by a bland or anesthetic ointment. Many substances are used as protective coating over the burn. Second and third degree burns need treatment by a doctor.

Fluids and salt solutions are helpful. Water, tea, coffee, carbonated beverages, etc., should be offered regularly to the injured, provided they are conscious.

Celanese Goes Plastic



Veenema & Wieggers, Inc., Paterson, N. J., has just completed a fleet of seven V & W trailers for the Celanese Corp., with walls and roof made entirely of flat "Alsynite" fiber glass reinforced plastic. Approximately 1000 sq ft of light green plastic panel were used in each truck, with heavyweight panels for the sides and standard weight for the roof top, with sheets butting into aluminum framing.

COMMERCIAL CAR JOURNAL, October, 1955



SPECIFY MIDLAND POWER BRAKES AND ENJOY REAL PEACE OF MIND!

When you order new highway transport equipment, be sure to specify Midland Power Brakes — then you can be sure of getting the finest. Yes, you can rely on Midland Power Brakes—air or vacuum—to give you long, trouble-free, satisfying service — and at the lowest overall cost.

Specify Midland, too, when replacing or *modernizing* the power brakes on your present equipment. Every Midland Air or Vacuum Power Brake Kit is especially engineered for the truck, tractor, or trailer for which it was designed — to give you top performance and positive protection at all times.

Specify Midland Power Brakes and enjoy real peace of mind!

THE MIDLAND STEEL PRODUCTS CO.

3641 E. Milwaukee Avenue • Detroit 11, Michigan
Export Department: 38 Pearl Street, New York, N.Y.

- Every working part in Midland's Power Brake Systems is thoroughly engineered and carefully tested to insure maximum efficiency and customer satisfaction.
- Midland Power Brakes are easily and quickly installed, come in complete kits for installation either at your nearest Midland distributor or in your own shop.
- Midland Power Brakes stop any legal load—quickly, easily, safely. Midland brake systems are designed and built with tremendous reserve power.
- Midland Power Brake Kits or parts—as well as service—are readily available through a national network of distributors, as well as representatives in most foreign countries. There's one near you.



Those Who Know
Power Brakes Choose
MIDLAND!

Fleetman's Library

Continued from Page 88

Cabinet Committee Report on Transport Policy was the subject of Congressional committee hearings late last month. For a copy of the American Trucking Assns. statement to this committee, circle L 6 on the postcard on page 84.

Hydraulic vise made by Columbian Vise & Mfg. Co. that is controlled by

foot pedals to leave both hands free to speed work is described in a bulletin you can get by circling L 7 on the postcard.

Aluminum surface cleaning and brightening in the truck trailer fleets is covered in this new brochure from Cee-Bee Chemical Co. Circle L 8 on the postcard on page 84 for your free copy.

Diesel trucks made by Autocar Division, The White Motor Co., are described in this folder. Several illustrations of the model and combinations

available for various uses are included. You can get a copy by circling L 9 on the postcard.

Diesel directory just made available by Cummins Engine Co. is a complete list of original equipment manufacturers who offer Cummins diesel engines as standard or optional power. Circle L 10 on the postcard on page 84 for free copy.

Headlamp replacement assemblies made by Auto Lamp Mfg. Co. for most GMC, Chevrolet, Dodge and Ford trucks are shown on this free wall chart. It includes exploded views of the headlamps to speed part identification and installation. Circle L 11 on the postcard for your copy.

Portable electric power tools made by Porter-Cable are described in this new catalog. It covers 52 tools, over 400 accessories, including saws, grinders, sanders, drills, planes, routers, shapers, etc. Circle L 12 on the postcard on page 84 for your copy.

Trailer dump bodies in Galion All-steel Body Co.'s "Transporter," "Excavator" and "Hitchhiker" lines are described in this new catalog. Models covered have 10 to 36-cu yd up to 50-ton capacity. Circle L 13 on the postcard for your free copy.

Trucks and trailer flooring of aluminum using extruded aluminum sections that interlock to form the complete floor are covered in this new brochure from Reynolds Metals Co. For your free copy, circle L 14 on the postcard on page 84.

High pressure combination cleaners with two or four guns that simultaneously deliver high pressure hot and (TURN TO PAGE 164, PLEASE)



Yes, it's a pleasure to have a Lamson Treasure Chest within easy reach as a handy source for the fastest-moving automotive fasteners. The chest is 20 gauge steel, painted bright red and measures 28" x 13" x 10". The nine double-size drawers accommodate 117 Lamson "25" Line packages or are adjustable for standard packages. Contents are clearly marked on the front.

CONTENTS AND LIST VALUES

	Total 25 Line Packs	Total List Value
SAE 1035 Cap Screws	31	\$19.80
Round Head Stove Bolts	8	6.22
USS 1035 Cap Screws	30	19.20
Lock Washers	8	6.00
Finished Hex Nuts - Fine Thread	8	5.60
Finished Hex Nuts - Course Thread	8	5.58
Pan Head "A" Tapping Screws - Plated	9	5.33
Oval Head "A" Tapping Screws - Plated	2	1.18
SAE Flat Washers	8	5.64
Hammerlock Cotters	5	3.85
	117	\$78.40

YOUR COST \$49.80—CONTACT YOUR JOBBER

The LAMSON & SESSIONS Co.
 1971 West 85th Street • Cleveland, Ohio
 Plants at Cleveland and Kent, Ohio • Chicago • Birmingham

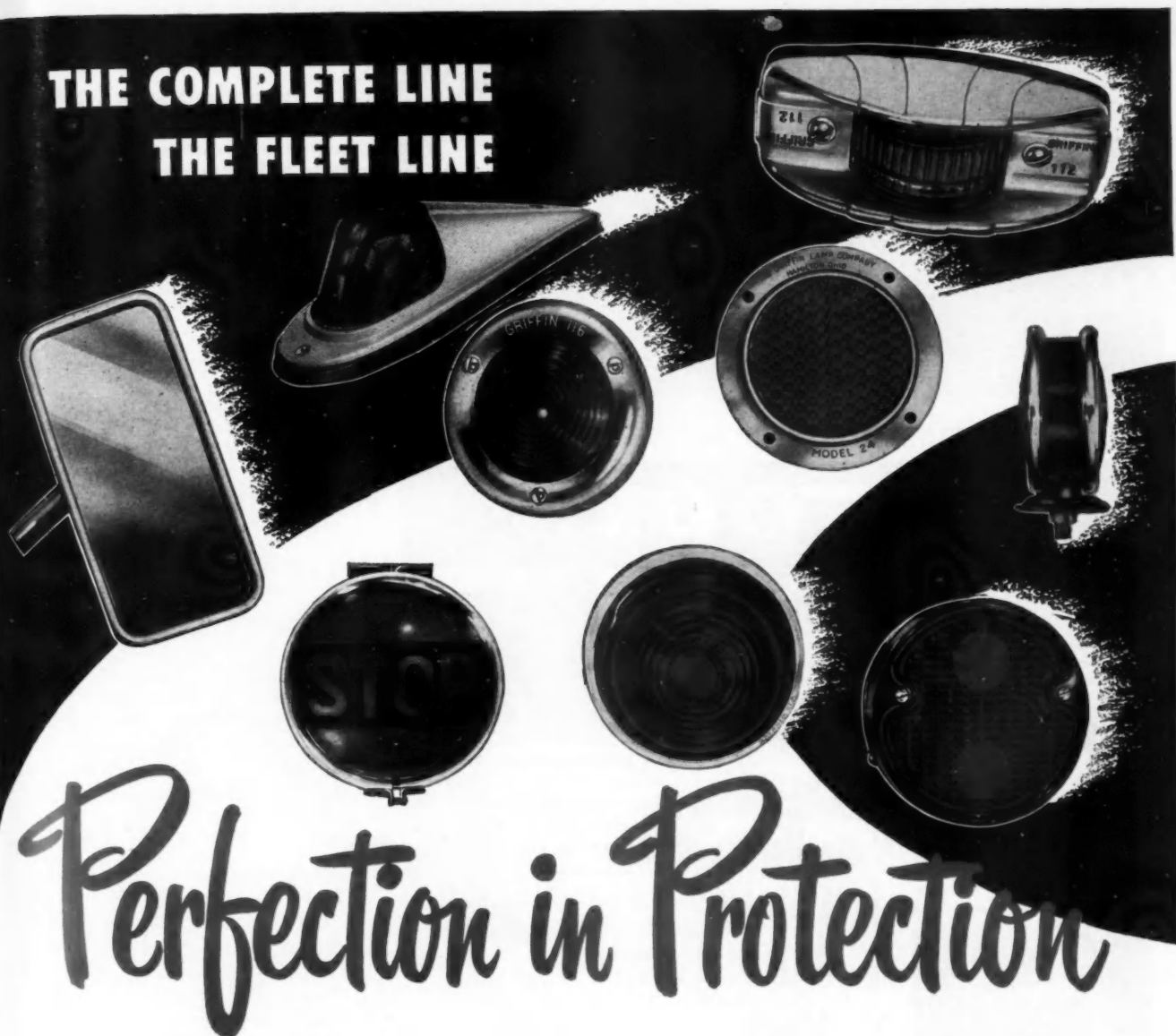
Lamson & Sessions

ONE OF THE WORLD'S LARGEST MANUFACTURERS OF AUTOMOTIVE FASTENERS



"Just checking the company's no rider rule. You guys will pick up anything, won't you, Colter?"

THE COMPLETE LINE THE FLEET LINE



Perfection in Protection

● Compare any lamp in the entire Griffin line with any other make. You'll find improvements throughout.

The reasons are obvious. Griffin concentrates on fleet requirements—and supplies every fleet need. Griffin makes every lamp heavier, sturdier, more dependable, to stand up under years of gruelling fleet use.

Griffin engineers find more rugged mate-

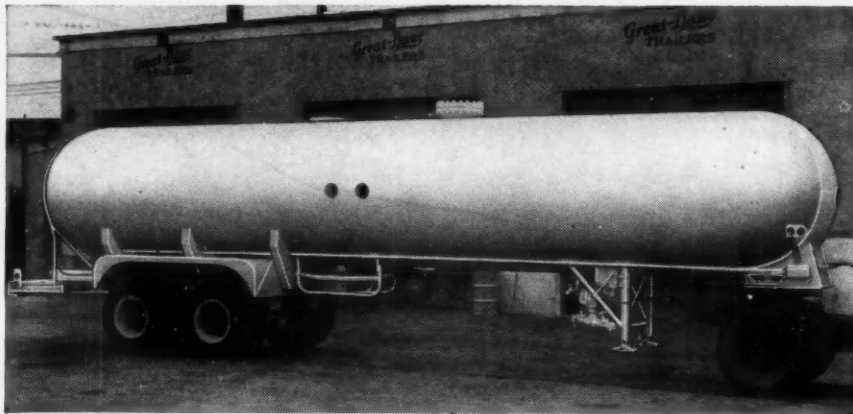
rials—and use them in heavier gauge—to give thousands of extra miles of life. They find new construction processes—and build improved models at competitive prices. And they develop new, exclusive *built-in XX safety factors* to make every Griffin lamp an engineering masterpiece. It will pay you to standardize with Griffin, the complete fleet line. Call your Griffin distributor now.

THE GRIFFIN LAMP COMPANY • HAMILTON, OHIO

Warehouses—736 East Washington Blvd., Los Angeles, California; 440 Golden Gate Ave., San Francisco, California
37 Leon Street, Boston, Massachusetts; 308 Ninth Avenue, North, Seattle, Washington

THE LINE WITH
BUILT-IN XX SAFETY FACTORS

GRIFFIN
AUTOMOTIVE SAFETY LIGHTING



Pressurized Tank Trailer

Great Dane Trailers announces a new over-the-road tank that will take up to 265 pounds of working pressure per square in. Built to ICC specifications and the ASME code to comply with various state laws, this high-strength steel alloy pressurized tank is ideal for hauling liquified petroleum gases or anhydrous ammonia. This trailer has a water-level capacity of 8000 gal.

Fleetman's Library

Continued from Page 162

high pressure cold water for heavy-duty cleaning are described in this new Malsbary Mfg. Co. catalog. Circle L 15 on the postcard for your copy.

Power derricks with up to 6-ton capacity for vehicle mounting and made by J. H. Holan Corp. are illustrated and described in this new catalog. Circle L 16 on the postcard for your free copy.

Occupational skin diseases is the subject of this new manual. It is designed to help recognize and prevent skin troubles in the handling of detergents, oils, greases, solvents, etc. in the fleet shop. For prices, write Assn. of American Soap & Glycerine Producers, Inc., 295 Madison Ave., New York 17, N. Y. Its full title is, "The Prevention of Occupational Skin Diseases."

Movers will be interested in a new brochure just published by ATA's Movers Conference of America entitled, "Van Driver Training Procedure." Copies are \$2 each, can be had by writing the Conference at 1424 Sixteenth St., N. W., Washington 6, D. C.

Destruction of records (operating, accounting, bills of lading, tickets, correspondence, etc.) as regulated by the Interstate Commerce Commission is covered in this 1955 edition revised booklet. It costs 15¢. Write Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Ask for, "Regulations to Govern the Destruction of Records of Class I Motor Carriers, Issue of 1955," Catalog No. IC 1 Mot.6:R 24/2.

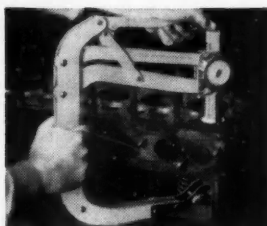
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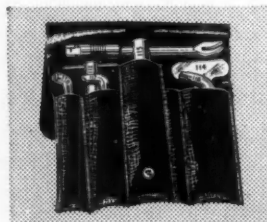
K-D TOOLS



K-D 428 Hose Clamp Pliers. To remove, install all sizes self-tightening hose clamps. Swivel jaws let you reach 'em anywhere in the motor.



380 Valve Spring Compressor. Almost universal in use. For L-heads, valve-in-heads, old or new—passenger, truck, bus. Most popular valve tool in U. S.



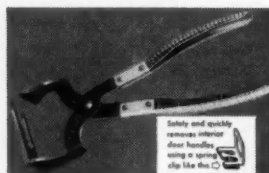
K-D 122 Ignition Kit. Complete enough for most any ignition adjustment. For Fords, Chevrolet, and others. Tools accurately forged, rustproofed.

designed
by
mechanics
built for
mechanics
**TO MAKE
HARD
JOBS
EASY**

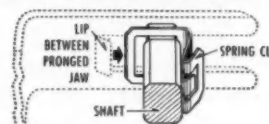
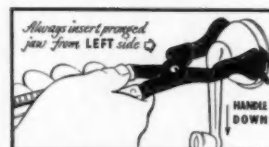


FREE CATALOG!
OVER 150 K-D TOOLS
FOR YOU. WRITE.

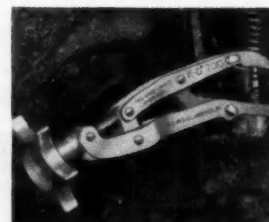
K-D MFG. CO.,
LANCASTER, PA.



K-D 435 Door Handle Remover. For all 1955 Chrysler-built. You cannot pry these handles off! Spring clip holding handles must first be shifted from a groove in



regulator shaft. Tool specially designed for job. See diagram explaining how it works... save yourself big trouble, get a 435. Sure, safe, rustproofed.



700 Valve Spring Lifter. Short, sweet, handwheel type for deep set L-heads (Ford 6). Only 8" long, plenty of lift for easy keeper replacement.



K-D Tools are built to last. In shops all over the nation you'll find K-D 380 Compressors still in daily use after 25 years service! See your Jobber.

IF IT MOVES

WE CAN STOP IT!



TDA BRAKES

*...for better control
of heavy-duty industrial and
farm equipment!*

DLM—Revolutionary new all purpose brake



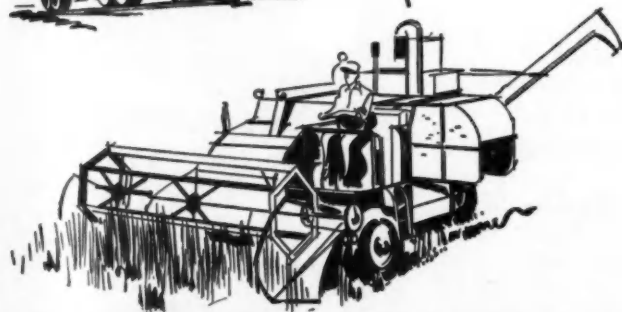
The versatile new DLM offers many improvements previously unavailable on most other present-day brakes. Its simple design utilizes only 8 parts . . . results in considerable savings in weight, installation and maintenance time, and actual material costs.

This new balanced-type brake insures constant, smooth performance in either direction of rotation, and is fully enclosed to protect against dust, dirt, and water penetration, reducing fire hazard . . . prolonging brake life . . . and improving on-the-job performance in all applications.

Exclusive features have greatly minimized service and inventory requirements, saving money for manufacturers and operators of trucks, harvesters, mixers, combines, winches, and many other types of heavy machinery . . . available in all sizes, for any type of work.

If somewhere in your business there is a special braking problem, big or small, we urge you to call on the ingenuity and vast knowledge of TDA engineers to solve it quickly, and at a minimum cost. An inquiry on your company letterhead will receive immediate attention. Just write Timken-Detroit Brake Division, Ashtabula, Ohio.

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TIMKEN
Detroit
BRAKES

TIMKEN-DETROIT BRAKE DIVISION
ROCKWELL SPRING AND AXLE COMPANY
ASHTABULA, OHIO



Business Expansion to Bring Increased Reliance on Trucks Says ATA's Curry

EXPANSION of the nation's current prosperity will bring increasing reliance upon motor transportation, Neil J. Curry, president of American Trucking Assns., told members of the Associated Traffic Clubs

of America in Cleveland late last month.

"In the normal course of events," he said, "we are in a long period of improving our standard of living. Expanded living standards mean

increased production and consumption, hence increased transport needs. Every form of transport—railroads, waterways, airlines, pipelines and truck and bus lines—will reflect in their operations this drive toward better and different living."

Increased Truck Capacity

Citing the rising trends in suburban living, consumption of food-stuffs and purchase of manufactured goods, and decentralization of industrial plants, Curry stated, "Continuation of all these trends will and must be reflected in increased capacity by truck transportation to meet the challenge of the changes."

He emphasized that his prediction of continued growth in motor transportation was based "upon the assumption that there will be no important changes" in government regulation of the transportation industry.

Shippers Set the Pace

Decisions to be made by traffic management executives, he said, will determine to a large extent what happens to the trucking industry. "The future of the trucking industry—the terms of its growth and development—the measure of its service to the shipper and consumer—all are in your hands," he told the traffic executives.

"All we have done is to attempt to meet the need and demand in terms which accomplished your requirements. You men in traffic management have been faced with a transportation problem. Trucks came into the picture largely in response to your statement of that problem. The

(TURN TO PAGE 170, PLEASE)



mechanism... The new Aero-Seal JET Hose Clamp has a patented mechanism that makes mechanics say, "Why didn't I think of that?"

Now it's so easy and quick to attach. Just draw the precision worm gear housing to the desired position on the band as you would tighten your belt through the clasp. Then a couple of turns with a screwdriver and it's tight and on to stay. No amount of vibration can make it open. To remove, loosen the screw a few turns, push the button, lift screwdriver head and it's off.

Aero-Seal JETs will not pinch or damage hose. Pressure is evenly distributed all around. Stainless steel bands resist corrosion. Forget discounts and remember it's turnover that makes profits. Aero-Seals sell.



BREEZE BREEZE CORPORATIONS, INC., 700 Liberty Avenue, Union, New Jersey



"Aw, hang your honor and virtue. The gas tank is under there!"

SAVE MONEY ON MAINTENANCE



wix

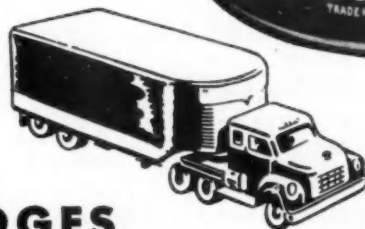
TOP QUALITY OIL FILTER CARTRIDGES Guard the Lives of Your Fleet Engines

WIX Engineered Filtration saves many ways for you . . . surveys your filtration needs FREE, sets up a time-saving inventory system tailor-made for your fleet, and provides complete Oil Filtration Service for every fleet vehicle — trucks, passenger cars and stationary engines, full-flow and partial-flow systems, gasoline or Diesel engines, lube or fuel oil.

WIX HEVI-DUTY Cartridges give you top-quality engine protection at lower cost — cut oil consumption, engine wear and expense, keep maintenance DOWN. Call your nearest WIX Jobber or write direct — ask for your FREE Filtration Survey today!

wix

OIL FILTERS CARTRIDGES
AUTOMOTIVE • INDUSTRIAL • RAILROAD
WIX CORPORATION • GASTONIA • N. C.
In Canada: Wix Accessories Corp. Ltd., Toronto

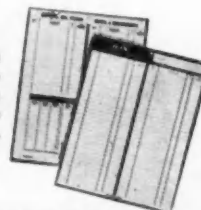


WIX-PAX SERVICE

Genuine, top-grade WIX HEVI-DUTY Cartridges, shipped prepaid, direct from factory or nearest WIX Warehouse with billing through your local wholesaler. At Money-saving WIX-PAX prices!

FLEET SURVEY

WIX surveys your filtration needs FREE, sets up an Inventory Control System which solves your cartridge-supply problem . . . automatically.



FLEET MANUAL

Shows the whole story on every payload unit at a glance . . . performance, repairs. FREE with your first WIX-PAX order.



DESIGNED ESPECIALLY FOR YOU...

Mister Distributor, Fleet Owner, Dealer . . .

WEATHERHEAD FIRST AGAIN... with the MOST...

⊞ Most Convenient ⊞ Most Practical ⊞ Most Compact ⊞ Most Permanent

⊞ Most Complete . . . Automotive Fittings Stock Cabinet Ever Built

17 OUTSTANDING FEATURES... reduces time and labor by 50%

Check These Features Against Your Present Stocking System

NO STOOP • NO SQUAT • NO SQUINT

1. **NO STOOP**—cabinet height 64".
2. **NO SQUAT**—bottom drawers 23" from floor.
3. **NO SQUINT**—cabinet front slopes back—easy visibility.
4. **HANDSOME APPEARANCE**—simple, practical, modern design.
5. **CLEAR PLASTIC DRAWERS**—durable, easily cleaned; contents always visible.
6. **192 DRAWERS**—individual drawer for each popular size of all fast-moving parts in the Weatherhead line of fittings.
7. **EXPANSION CAPACITY**—original stock shipment is one package each of 161 different fittings . . . leaving 31 drawers for stock expansion.
8. **DRAWER LABELS**—each drawer has its own plastic identification label—identifies part by illustration, part number and part type.
9. **PERMANENT PLASTIC LABELS**—label fits into grooved channel, easy to remove and clean; relabeling unnecessary.
10. **DRAWERS INTERCHANGEABLE**—drawers or labels may be rearranged for user to set up his own selected stock numerical sequence.
11. **DRAWER HANDLES**—convenient, finger-pull type.
12. **SAFETY STOP**—at reverse end of drawer—no spilling of contents.
13. **IDENTIFICATION PANELS**—holes, numbers and markings on side panels provide means for quick, positive physical identification of pipe, tube and fitting sizes. Stray parts readily identified.
14. **PERMANENT CATALOG HOLDER**—metal side pocket for complete Weatherhead catalog. Permanently attached to cabinet by means of chain.
15. **SPECIAL CATALOG COVER**—grease and wear-resistant.
16. **STOCK ORDER FORM**—specially designed for fast inventory checkup and reordering.
17. **STOCK SHIPMENTS**—for stock replacement, parts are shipped from factory in standard packaged quantities.



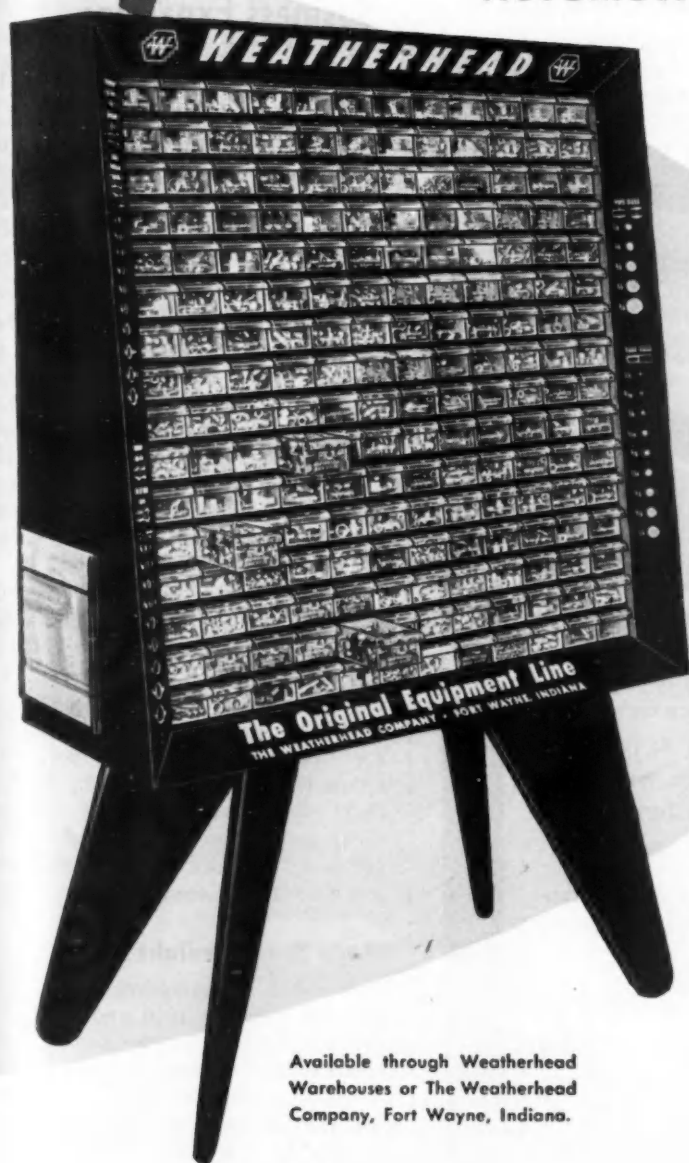
World's largest original equipment manufacturer of automotive brass tube fittings, drain and shutoff cocks, fuel and oil lines, brake hose, power steering hose, dash controls.

WEATHERHEAD LEADS THE WAY

THE NEW WEATHERHEAD

F-1 *Merchandiser*

AUTOMOTIVE FITTINGS STOCK CABINET



Available through Weatherhead
Warehouses or The Weatherhead
Company, Fort Wayne, Indiana.

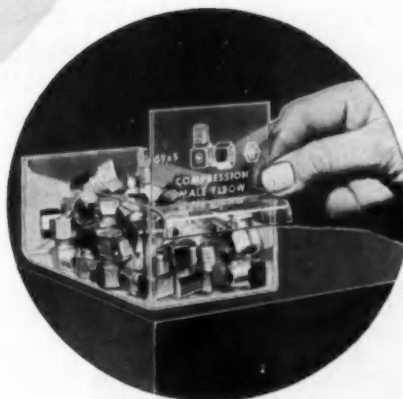
**A MASTERPIECE
IN DURABLE UTILITY**

**SPECIAL INTRODUCTORY
OFFER**

Limited Time Only

Ask about trade-in allowance on
present cabinet and bonus allow-
ance on purchase of F-1 complete
with initial stock shipment.

- NO STOOP
- NO SQUAT
- NO SQUINT

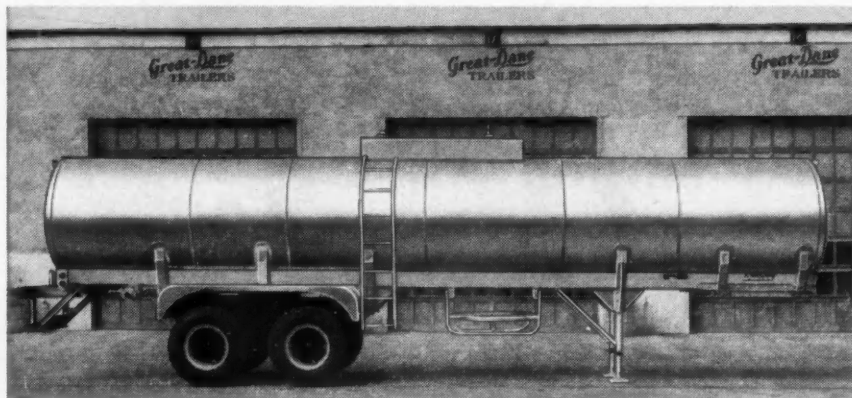


Detail of drawer label. Label slides into groove.
Completely protected and permanently readable.



WEATHERHEAD

**THE WEATHERHEAD COMPANY, FORT WAYNE DIVISION, DEPT. C-10, 128 WEST WASHINGTON
FORT WAYNE, INDIANA**



For Liquid Fertilizer

Great Dane Trailers announces a new model all-aluminum Series No. 54-T trailer that has been designed for transporting liquid fertilizers with unloading pressures up to 35 psi. Certain chemicals which normally corrode steel can be hauled safely in this new light-weight tank which is also economical to operate.

Business Expansion...

Continued from Page 166

record shows that growth and development of truck transportation in this country has been almost entirely due to the requirement of the shipper."

Economic Changes

Curry noted the revolutionary effects during the past 15 years of the 36 per cent increase in suburban population, the rapid increase in percentage of foodstuffs being shipped by truck, and the current revolution in the disposition of key industries due to preparedness requirements, and the implications for the trucking industry in these trends.

Food spending has risen from 23 per cent of the average American's disposable income to 27 per cent, he said, adding that a "leading farm expert confidently predicts we will increase our use of dairy products in the next 20 years by 45 per cent; citrus fruits and tomatoes by 152 per cent; leafy vegetables by 80 per cent; meat, poultry and fish by 45 per cent; potatoes by 20 per cent, and grain by 29 per cent."

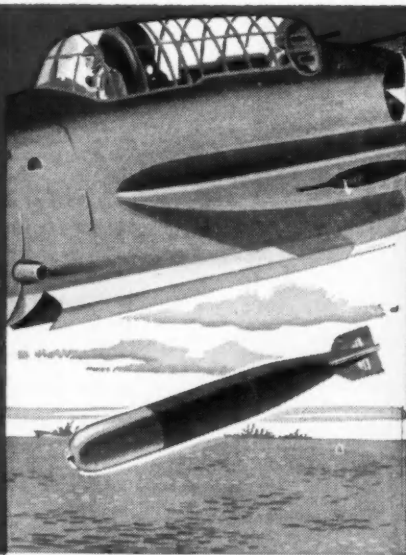
More Truck Freight

Personal consumption jumped 62 per cent between 1940 and 1953, Mr. Curry said, and in the same period total truck registration showed an increase of 106 per cent, truck mileage 112 per cent, and truck intercity mileage by 194 per cent.

"The items towards which the trend is setting are those especially adaptable, and indeed presently hauled by truck. For example: meat. In the past 20 years the percentage of cattle hauled to market by truck has risen from 44 to 80 per cent; calves, 51 to 82 per cent; hogs 55 to 85 per cent, and sheep 21 to 52 per cent. The trend is still upward."

(TURN TO PAGE 174, PLEASE)

*Next time
you buy
batteries*



...take a tip from a "tin fish"

- Exide research and specialized experience developed batteries that made the electric torpedo a practical weapon. This same research works for you when you put Exide ULTRA START® Batteries—with *Silvium*®—in your fleet.
- *Silvium* is a patented alloy that combats grid corrosion and sulphation—the deadly killers that account for 82% of all battery failures.



- In either stop-and-go or high mileage service, you'll get lower battery costs per mile, less down time . . . with Exide ULTRA START Batteries.

Exide®

AUTOMOTIVE DIVISION
P.O. Box 8109 • Philadelphia 1, Pa.

GUARANTEED
48 Service Units

The figures
of all those
all overhaul
work on axle

And remem
of your pro
trucks you
drivers have

These costs

With self-s
expenses —
truck-life to

And you ca
effort-savin

— in 65 new

— in 7 two-c

GCW

— in 15 new

55,000 GCW

— in 9 c.o.

70,000 GCW

— in 9 rugg

to 70,000 G

— teamed w

sixes, V8's

— in Blue C

— improved

Get full det

GMC dealer

*Hydra-Matic

some others

GMC TRU



The figures are right on your books. Just add the charges of all those clutch replacements — of all their repairs — of all overhauls of overtaxed engines — of all the extra service work on axles and drive-lines damaged by shock-load starts.

And remember—these “fixed” costs are eating chunks out of your profits no matter what kind of standard-shift trucks you use or how much clutch-and-shift skill your drivers have.

These costs will shrink with Hydra-Matic GMC's*

With self-shifting GMC's, you not only reduce those expenses — but cash in on reduced down time and longer truck-life to boot.

And you can now have all Hydra-Matic's timesaving — effort-saving — truck-saving advantages...

- in 65 new Blue Chip models ranging up to 70,000 GCW
- in 7 two-cycle Diesel models from 30,000 GVW to 70,000 GCW

- in 15 new dual-purpose cab models from 16,000 GVW to 55,000 GCW

- in 9 c.o.e. “Stripaway” models from 32,000 GVW to 70,000 GCW

- in 9 rugged new tandem-axle models from 28,000 GVW to 70,000 GCW

- teamed with a wide choice of Blue Chip power plants — sixes, V8's and Diesels — from 125 to 230 h.p.

- in Blue Chip GMC's with greater-than-ever ruggedness
- improved turning ability

Get full details on any one of them—right now—at your GMC dealer's!

**Hydra-Matic standard on many models; optional at extra cost on some others*

GMC TRUCK & COACH — A General Motors Division



Your Key to Blue Chip Value

Business Expansion . . .

Continued from Page 170

Suburban Truck Business

Remarking on the still increasing rise in growth of suburban retail centers, with plenty of parking for the family auto, Curry said:

"It takes no qualified prophet to arrive at the conclusion that the trend toward suburban living has vast implications for truck service. These

shopping centers are solely dependent upon trucks for everything they sell—their stock in trade. No other transport facility can serve them because of their location."

Industry Dispersal

As one result of living in a state of continual preparedness, Curry said, there is "almost a revolution underway in the disposition of key industries. . . . It is significant to note that eight out of ten of all (industrial) plants built since 1951 are on dispersed sites, but that only half of

some 22 of the most important plants in terms of national security are as yet thus dispersed. But the trend is obvious."

"Throughout the United States, and for reasons totally unconnected with defense or bombs, there is a steady trend which is taking manufacturing and processing enterprises out of centers of population.

Truck Flexibility

"It is clear that one reason why this can be done . . . is access to satisfactory transportation—existence of flexibility in transport. And flexibility is a watchword in truck service. There is no question whatever that the trucking industry will be called upon, as it has been and is now being called upon, to engineer its service to this pattern of dispersal. More than any other transportation facility, truck transport can adapt itself to this changing pattern."

Pointing out that the for-hire service the public receives is regulated, he said, "What I have said about the development of truck service is contingent, of course, upon the terms of that regulation. . . . We have the finest transportation system in the world. Every agency of transport is reaching new high levels of business. This year should be a banner year for railroads, airlines, waterways, pipelines and trucks—perhaps the greatest year in the history of each.

"We have got where we are in transportation in this country under rules of competition which we think are basically sound. At this time there are proposals to change those rules. Personally I know of no widespread demand from shippers or the business community to make such changes."



STOP

"ROUGH RIDING" YOUR TRUCKS!



**USE A
HANDY
GOVERNOR**

KS

**SENSIBLY CONTROLLED SPEEDS
are both ECONOMICAL and SAFE**

KING-SEELEY CORPORATION
ANN ARBOR, MICHIGAN



"Our new mechanic has excellent credentials, Bart. See what she can do best!"

COMMERCIAL CAR JOURNAL, October, 1955

ANOTHER HASTINGS FIRST ...

and only Hastings has it!

PATENTED *

BEVELED 2-C OIL RING

**seats 3 to 4 times faster
than other chrome rings!**

*PATENT NOS. 2511874, 2565042, 2712971

See the difference!

BEVELED CHROME RAILS—

make fineline contact with cylinder wall for a faster seat. Less area to wear-in means less time to break-in.

CONVENTIONAL CHROME RAILS—

originated by Hastings
... now replaced by
Beveled Chrome.

*TOUGH but oh so gentle



Only Hastings gives you a chrome oil ring with patented, *beveled rails*—a chrome ring set that seats 3 to 4 times faster than conventional chrome!

These exclusive beveled rails make positive, fineline contact with any cylinder wall—tapered, out-of-round or re-bored. Oil control starts right now. And because beveled design permits use of a lighter inner spring, you get a *soft pressure* oil ring that is gentle on cylinder walls.

Beveled chrome oil rings are included in all Hastings 2-C Chrome Sets. With Hastings torsional designed, high-graphitic compression ring in the same "Motor Engineered" set, you get the fastest seating, best performing chrome combination there is!

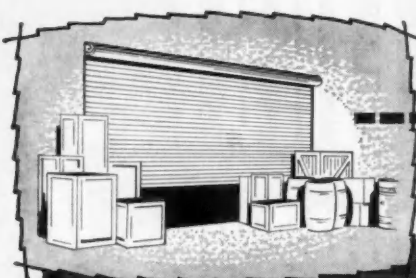
Next ring job, install the *only* chrome rings that are beveled to seat fast, and stop oil-pumping from the start. Install Hastings 2-C Chrome—made by replacement specialists!

HASTINGS MANUFACTURING COMPANY, HASTINGS, MICHIGAN • HASTINGS LTD., TORONTO
Piston Rings, Casite, Oil Filters, Spark Plugs, Wear Reducer

HASTINGS STEEL-VENT PISTON RINGS

Chrome Faced for Heavy-Duty Service

*TOUGH on oil-pumping • GENTLE on cylinder walls



**save
space**



with

Kinnear Steel Rolling Doors

Opening straight upward, Kinnear Rolling Doors coil out of the way above the opening, into the compact hood mounted on the wall (or often within the wall, where desired).

They give you full use of all space around doorways at all times. *No extra space of any kind is needed for their opening action and closing action.*

The rugged interlocking steel-slat curtain (*originated by Kinnear*) also gives you added protection

against fire, theft, vandalism, storms, and accidental damage.

For extra resistance to weather and corrosion, Kinnear Rolling Doors are heavily galvanized, with 1.25 ounces of pure zinc per square foot of metal (ASTM standards).

Kinnear Rolling Doors are built any size, for easy installation in either old or new buildings of any construction. Manual-lift, chain, or crank operation—or motorized push-button control. **Write for full details.**



KINNEAR
ROLLING DOORS

Saving Ways in Doorways

The KINNEAR Mfg. Co.

FACTORIES:

2100-20 Fields Ave., Columbus, Ohio

1742 Yosemite Ave., San Francisco 24, Calif.

Offices and Agents in All Principal Cities

October News Roundup

Continued from Page 98

each month. In order of succession, the courses are: (1) Test equipment operation—covering the latest methods of using modern electronic test equipment in the service operation, (2) automotive electricity—fundamental construction and operation of modern six and twelve volt electrical systems and their corresponding test procedures, (3) modern tune-up procedure—using scientific test equipment to prove the tune up, (4) service merchandising—covering customer relations and effective methods of selling needed service. Living accommodations near the training center are available at reasonable rates. Information regarding the new training program may be obtained by writing Sun Electric Corp., Harlem & Avondale Aves., Chicago 31, Ill.

1955 Truck Trailer Shipments*

	July	Seven Months
Vans:		
Insulated and Refrigerated:		
Steel.....	68	733
Aluminum.....	319	2,348
Furniture:		
Steel.....	69	1,055
Aluminum.....	13	114
All other closed-top vans:		
Steel.....	861	5,258
Aluminum.....	1,747	12,408
Open-top:		
Steel.....	152	968
Aluminum.....	180	1,258
Total—Value.....	3,409	24,221
Tanks:		
Petroleum.....	407	2,545
All other.....	64	385
Total—Tanks.....	471	2,930
Pole, Pipe and Logging:		
Single Axle.....	114	499
Tandem Axle.....	142	685
Total.....	256	1,387
Platforms:		
Racks, livestock and stake.....	110	700
Grain bodies.....	88	535
Platforms (flats), all types.....	702	4,240
Total—Platform.....	900	5,463
Low-bed heavy haulers.....	206	1,748
Dump trailers.....	218	1,162
All other trailers.....	239	2,336
Total—Complete Trailers.....	5,699	39,267
Chassis only.....	190	1,811
Total—Trailers and Chassis.....	5,889	41,178

* Industry Division, Bureau of the Census.

Ford's New Plant

The Ford Motor Company dedicated its new automobile and truck assembly plant in Mahwah, N. J., on Sept. 29. Governor Robert B. Meyner of New Jersey and Henry Ford II, president of Ford Motor Co., participated with more than 10,000 residents, employees, civic, business, and industrial leaders from New York, New Jersey (TURN TO PAGE 180, PLEASE)

Who profits when you buy CP air tools?

Zip it cuts! Look how easily and evenly the CP Zip Gun cuts through this truck body. It not only cuts sheet metal, spot welds, pins and rivets; but it also drives chisels, punches; does riveting, chipping and scaling; and scrapes undercoating, paint, dirt.

CP Air Impact Wrench with its **CONTROLLABLE POWER** feature has plenty of reserve power for removing those tough, rusted nuts. Then quick-as-a-wink it can be set to run nuts and bolts to predetermined, uniform tightness.

Just look at this CP-790 Air Impact Wrench in action! It has all the power and control needed to turn those huge U-bolts to just-the-right tightness.

Other CP Air Impact Wrenches are available in $\frac{1}{2}$ " , $\frac{3}{4}$ " and 1" square drive capacity models. They're furnished with attachable angle heads for close quarter jobs.

YOU PROFIT... CP Air Impact

Wrenches, Zip Guns, Bead Breakers and Pneu-draulic Truck Jacks not only speed up maintenance, repair and body work in your shop but they keep vehicles on the road longer . . . increase your pay load mileage.

YOUR MECHANICS PROFIT...

they can do spring maintenance, make wheel changes and handle other heavy work with less fatigue . . . and if they're paid piece rates they can increase their take home pay.

YOUR CUSTOMERS PROFIT...

the 75% of nut turning time saved by CP Air Impact Wrenches . . . the speed of the Zip Gun on body repair work . . . the time-saving qualities of the CP Pneu-draulic Truck Jack and the Bead Breaker all add up to make a quick turnover in the shop and insure fast, high quality service for customers.



Chicago Pneumatic

8 East 44th Street, New York 17, N. Y.

AIR AND ELECTRIC IMPACT WRENCHES • PNEU-DRAULIC TRUCK JACKS AND PUMPS • ZIP-GUNS • BEAD BREAKERS

COMMERCIAL CAR JOURNAL, October, 1955

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October News Roundup

Continued from Page 176

and Connecticut attending the ceremonies held in front of the plant's administration building which faces Route 17 on the New York-New Jersey border.

New Reefer Units

Carrier Corp. and the Air Conditioning Division, Tropic-Aire, Inc.,

announce their joint entry into the truck-trailer refrigeration field. A development, manufacturing and marketing arrangement between the two

companies will supply a complete line of trailer refrigerating units under the trade name Tropic-Aire/Carrier. Operating under a similar program, the two firms have equipped more than 6000 air conditioned buses in operation today. The new trailer unit will use Carrier refrigerating machines and coils, Continental Motors gasoline or diesel engines and will be manufactured according to designs developed by these organizations and Tropic-Aire, Inc. Tropic-Aire, Inc., will handle all manufacturing, sales and service.

ATA Engineering Dept.

A new Dept. of Engineering has been established by American Trucking Assns., including the former Equipment and Operations Section. Administrative supervision of the new department will be under Assistant General Manager William A. Bresnahan. The three sections of the new unit are Automotive Engineering (Lewis C. Kibbee, chief, and Charles P. Hoffman, automotive engineer), Highway Engineering (H. A. Flanagan, chief, and Richard A. Lill, research engineer), and Radio and Communication (Robert L. Abel, chief).

Only One Accident

When a truck collides with a train and damages railroad cars owned by 14 different railroads, the collision nevertheless is one accident, and the truckman's insurance applies only to its limit in that accident rather than to individual damages to each railroad in the total amount of the policy. This was the view given by the U. S. Fifth Circuit Court of Appeals that reversed an earlier court decision that held the circumstances to constitute 14 accidents (May, page 190).

Michigan PR

Michigan Trucking Assn. pushes its public relations program with its second edition of "Truck Transportation in Michigan." Distribution is to schools, libraries, public officials and association members. It stresses growth and economic importance of industry to Michigan.

(TURN TO PAGE 182, PLEASE)

1955 Domestic Truck Factory Sales by G.V.W.*

	5,000 lb. and less	5,001-10,000	10,001-14,000	14,001-18,000	18,001-22,000	22,001-26,000	Over 26,000	Total
January.....	37,040	12,271	3,300	12,015	3,178	2,784	3,363	73,949
February.....	28,500	9,113	2,319	9,045	2,808	2,910	3,586	55,253
March.....	43,294	14,454	3,543	14,836	2,671	2,958	4,314	86,070
April.....	55,955	17,933	4,146	19,041	3,828	3,574	5,630	110,205
May.....	54,231	17,092	4,345	19,397	4,288	3,293	5,750	108,377
June.....	47,614	16,615	3,576	16,591	5,363	3,812	6,129	101,540
July.....	42,482	14,883	3,261	19,206	5,127	3,770	5,010	93,739
Total—7 Mos. 1955.....	306,116	102,361	24,490	112,131	27,283	22,410	34,442	629,233
Total—7 Mos. 1954.....	250,757	98,610	21,106	92,086	19,267	27,007	21,714	530,747

*—Automobile Manufacturers Association.

**Now—Increase
your payload
2,500 POUNDS**

with
this



Tandem axle trailer — 20 cu. yd. capacity.

PENN Aluminum Trailer Body and front mounted hoist!

Haul more coal, lime, sand, gravel, asphalt, cinders, fertilizer and bulk grain.

• Heavier payloads and increased profits result when you haul in Penn Aluminum Bodies. Lighter in weight these aluminum bodies are as sturdy and strong as conventional bodies. Gasoline consumption and tire wear are lessened by the reduced body weight. Body, chassis and hoist as illustrated weigh 9200 pounds as compared with 11,700 pounds for a like steel body—a weight savings of 2500 pounds. On larger bodies the weight advantage is even greater.

PENN FRONT-MOUNTED HOISTS ARE . . .

LIGHTER—because of the single hoist and the fewer parts required for its installation.

EFFICIENT—it places more weight on the tractor axle and less on the trailer chassis axle.

SAFER—all body overhang is eliminated since the load is lifted from the front—greater stability is assured. When in use, this hoist has proved to be more than 95% safer than other types of hoist installations.

ECONOMICAL—the single hoist requires less parts and maintenance.

Your Inquiries are welcome

**Truck Body Specialists with 22 years
experience in the use of telescopic hoists**

PENN BODY DIVISION

**HOCKENSMITH
CORPORATION**

PENN, PA. Call: Jeannette, Pa., LAfayette 3-5401 . . . Pittsburgh, Electric 1-1242

Total
73,949
55,283
86,070
110,205
108,377
101,640
93,739
629,233
530,747

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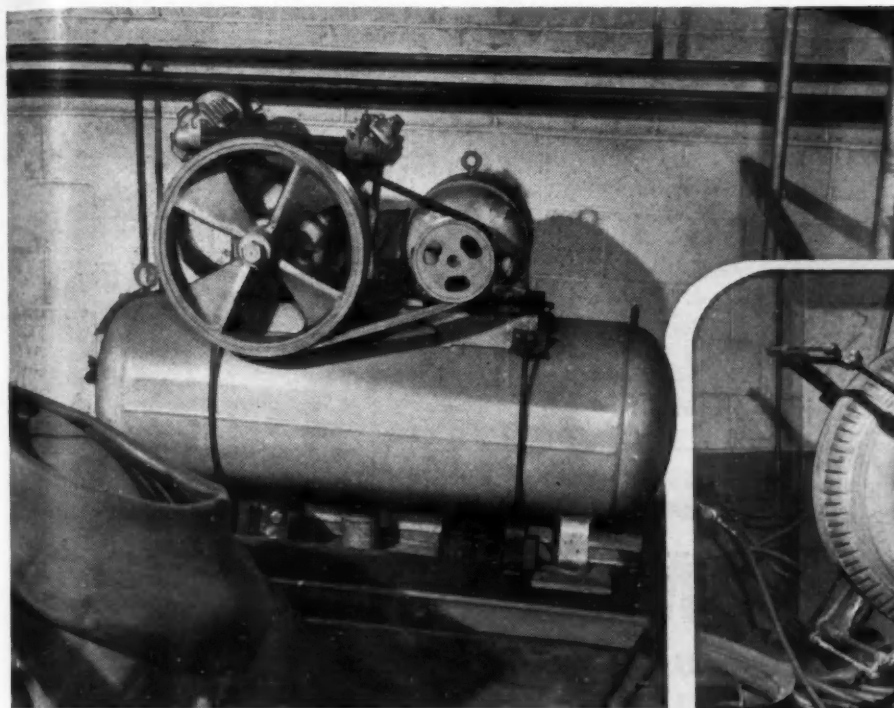
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ASE)

ber, 1955



24-Hour Worker

Every hour of the day this fleet owner relies on Westinghouse Compressor dependability to service 53 tractors, 32 trucks, and 95 trailers

This trucking-company garage regularly services over 175 trucks and trailers. They roll out on time with a big push from a Westinghouse Air Compressor and the many tools it powers.

Not only tire spreaders, but inflaters, grease guns and air grinders . . . all these are powered from one source through the flexibility that only air can give. You, too, want a compressor — a Westinghouse Compressor that delivers these services 24 hours each day — with no downtime to up costs. Check these Westinghouse features:

Automotive type lubrication — pressure principle forces oil to every moving part for longer life.

Low oil-level protection — your Westing-

house won't pump air if the oil level or oil pressure is too low. You never pay for repairs for lack of lubrication.


Starting unloader — keeps compressor unloaded until motor reaches normal speed and oil circulation starts.

Thermal overload protection — cuts current if motor should overheat.

Air-cooled design — provides air at maximum efficiency. Costs less to operate.

All this, plus 15 exclusive design features, gives you greatest dependability and versatility. You're money ahead when you specify Westinghouse Air Compressors. Sizes ½ to 15 hp. See your distributor or write for full profit-making story now.

W-106

LE ROI  *Division of Westinghouse Air Brake Co.*
Milwaukee 14, Wisconsin



PORTABLE AIR COMPRESSORS



TRACTAIR



STATIONARY AIR COMPRESSORS



AIR TOOLS



ENGINES

Distributors in all principal cities

October News Roundup

Continued from Page 180

Route Deviation Rules

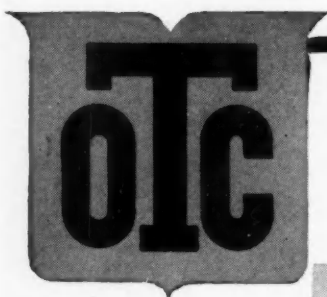
ICC has issued new rules setting standards under which motor carriers may deviate from routes authorized by ICC. The regulations cover use of relocated, renumbered and alternate highways and deviations from author-

ized routes. They apply to all regular route motor carriers.

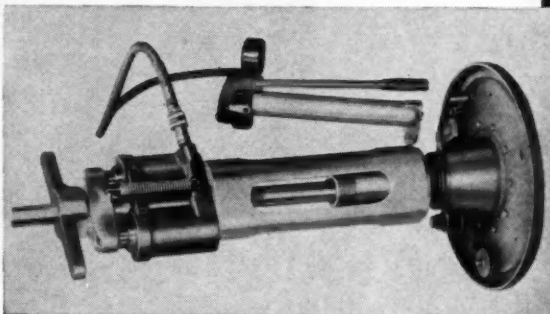
GSA's New Look at OS&D

The General Services Administration has discontinued the practice of deducting amounts claimed for loss or damage prior to payment of transportation charges.

Under its new policy, GSA will pay full transportation charges on bills of lading bearing a loss or damage notation and then file a claim with the carrier for the OS&D.



ANNOUNCES HYDRAULIC TRUCK AXLE TUBE PULLER



OTC 50 Ton hydraulic unit removing tube from truck axle housing—set up and pulling takes only a few minutes.

**SAVE HOURS
OF LABOR**

AND DOWN TIME ON EVERY PULLING JOB

With this new OTC 50 Ton hydraulic puller set, truck axle tubes may be removed (even if broken) and installed in minutes instead of hours. Assembly is simple and positive—tubes are removed without damage—and installed without distortion. Costly *Down Time* is cut by hours.

The OTC 50 Ton hydraulic unit is adaptable to hundreds of similar jobs. With the many OTC pullers and adaptors available it may be used as a portable power unit in shop or field, to push, pull, spread, lift, and straighten.

Shops already equipped with the 50 Ton unit need only to add the appropriate pulling and installing attachments.

SEE YOUR JOBBER OR WRITE US FOR COMPLETE INFORMATION



One man can quickly install a truck axle tube without distortion with a new OTC 50 Ton hydraulic unit.

FREE NEW
HYDRAULIC
PULLING BOOKLET

OWATONNA TOOL COMPANY 341 CEDAR STREET
OWATONNA, MINNESOTA



... George E. Ellis, appointed general sales manager, Lipe-Rollway Corp., Syracuse, N. Y.



... Adrian J. Moorhead, promoted to transportation superintendent, products distribution dept., The Ohio Oil Co., Findlay, Ohio.

... John R. Horton, promoted to manager, Texas division (Dallas, Texas), Four Wheel Drive Auto Co., Clintonville, Wis.

... Robert B. Miller, named general sales manager, and Thomas H. Griffin, promoted to San Francisco, Cal., branch manager, Wheel Industries of California, Los Angeles, Cal. (a subsidiary of the Budd Co.).



... Harold E. Hilty, promoted to service manager, The Flexible Co., Loudonville, Ohio.

... Jack R. Kennedy, promoted to Chicago area regional sales manager, AC Spark Plug Division, General Motors Corp., Flint, Mich.

... Daniel T. Light, appointed San Francisco, Cal., area district representative, Prest-O-Lite Battery Co., Inc., Toledo, Ohio.

... Alec J. Moir, appointed Detroit area district representative, Auto-Lite Battery Corp., Toledo, Ohio.

... Roland A. Fulghum and John N. Felton, promoted to managers of the San Francisco, Cal., and Omaha, Nebr., automotive branch offices, Automotive Division, Wagner Electric Corp., St. Louis, Mo.

... Arthur C. Delaney, appointed Denver, Colo., area sales representative, The Strick Co., Philadelphia. He was with Hollingshead Corp.

(TURN TO PAGE 184, PLEASE)



You Just Can't Beat STEEL

BE PREPARED . . .

CARRY A SET IN EVERY TRUCK

• When rubber slips... steel grips. Tests prove WEED V-BARS best on ice or snow. They stop you shorter, straighter, safer . . . provide the traction that keeps you rolling all winter long.

WEED V-BARS last longer . . . give you more traction you can trust for every dollar you invest.

for safety, performance, economy . . .
insist on

WEED V-BAR TIRE CHAINS

In Business for Your Safety

ACCO



**AMERICAN CHAIN DIVISION
AMERICAN CHAIN & CABLE**

York, Pa., Boston, Chicago, Denver, Houston, Los Angeles, New York, Philadelphia, Pittsburgh, Portland, Ore., San Francisco, Bridgeport, Conn.

**WEED
TIRE CHAINS**

COMMERCIAL CAR JOURNAL, October, 1955

October News Roundup

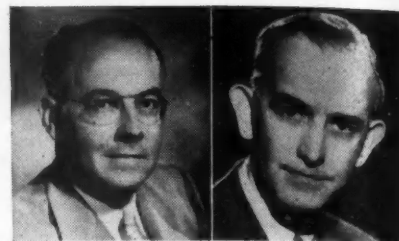
Continued from Page 182

... M. T. Sprague, promoted to Oakland, Cal., district manager, G. S. Stewart, promoted to Portland, Ore., district manager, R. M. Beauchamp, promoted to Portland, Ore., assistant district manager, R. W. Maxwell, promoted to Richmond, Va., district manager, Barr Crawford, transferred to St. Louis, Mo., district manager, H.

A. Herman, transferred to Pittsburgh, Pa., district manager, and M. J. Gowan, transferred to Fort Wayne, Ind., district manager, motor truck division, International Harvester Co., Chicago.

... B. E. Phillips, promoted to assistant sales manager, Industrial Truck Division, Clark Equipment Co., Battle Creek, Mich.

... George B. Shaw, appointed eastern sales representative (Newark, N. J.), Andrews Trailers and Truck Bodies, St. Louis, Mo.



... Thomas J. Delaney, left, and R. A. Fryer, right, named director and assistant director respectively, advertising and sales promotion, The White Motor Co., Cleveland, Ohio.

... A. L. Platky, promoted to product sales manager (Chicago), P&C Hand Forged Tool Co., Portland, Ore.

... S. Austin Marquis, and John Burman, promoted to manager and assistant manager respectively, Automotive Sales, L. O. F. Glass Fibers Co., Toledo, Ohio.

... William Auger, named western regional sales manager, Powr-Pak Division, Napco Industries, Inc., Minneapolis, Minn.

... Henry Liebschutz, appointed assistant to the chairman, ATA Foundation Inc., Washington, D. C.

... John B. Banks, appointed sales manager, Central Region (Detroit), L.O.F. Glass Fibers Co., Toledo, Ohio.

... John R. Sheen, appointed district manager, Virginia, North and South Carolina, Price Battery Corp., Hamburg, Pa.

... Edward C. Campbell, promoted to sales manager, Eastern Region, Dunlop Tire and Rubber Corp., Buffalo, N. Y.

... Guy E. Mulholland, appointed safety director, Michigan Motor Truck Assn., Detroit.

... Sheldon G. Little, promoted to assistant chief engineer, GMC Truck & Coach Division, General Motors Corp., Pontiac, Mich.

... B. C. Sears, promoted to regional manager, Great Lakes Region (Cleveland, Ohio), Cummins Engine Co., Columbus, Ind.

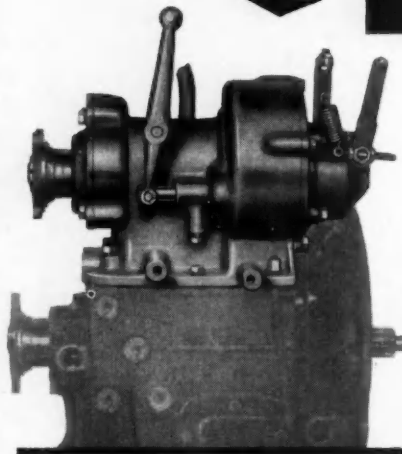
... Warren E. Hill, elected president and director, Thermoid Co., Trenton, N. J.

... E. J. Bird, named regional manager (Ill., Ind., Ohio, Mich., and parts of Wis., Ky., Pa., and N. Y.), automotive battery sales, Gould-National Batteries, Inc., St. Paul, Minn.

... W. N. South, named chief engineer in charge of transportation (TURN TO PAGE 189, PLEASE)

TOP MOUNTED

FULL TORQUE *Tangen* POWER-DRIVE

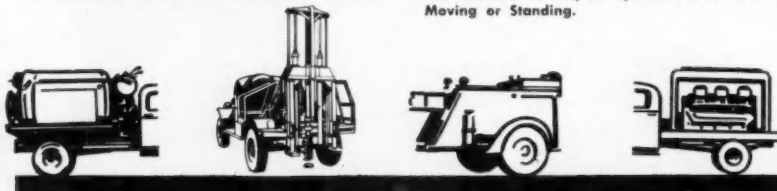


NEW MODELS for 4 Speed Helical Gear Transmissions

The Tangen Power Drive is mounted directly on top of the present transmission and receives full power directly from the vehicle engine through the main drive gear and transmits this power to any piece of equipment.

The Tangen Power Drive does not interfere with the normal operation of the transmission in any way. Requires no structural change in the chassis. Easily installed. Positive Pierce Governor installed on output shaft (optional) which regulates engine speed exactly when Power Drive is in operation.

The Power Drive may be operated with the vehicle Moving or Standing.



ALL-PURPOSE POWER DRIVE FOR:

ARC WELDERS • PUMPS • GENERATORS • SILAGE CUTTERS • AIR COMPRESSORS • MOBILE CRANES
• GRINDERS • FIRE EQUIPMENT • TIMBER OR BUCKET POWER LOADERS • SPRAYERS • CONVEYORS
• BUZZ SAWS • TRANSIT MIXERS • WINCHES • EARTH DRILLS •

And countless other practical uses

Designed for
FORD DODGE
and all trucks using
WARNER T-98
TRANSMISSION

Does the Work
of an
Auxiliary Engine
No Additional
Upkeep

LOWER FIRST COST

Mobile Power, Inc.

611 S. WALNUT ST.
LANSING 33, MICH.



October News Roundup

Continued from Page 184

equipment sales, Rankin-Wood & Co., Indianapolis, Ind.

... W. D. Thomas, promoted to fleet sales manager, west coast region (Los Angeles, Cal.), Gould-National Batteries, Inc., Minneapolis, Minn.

... Edward E. Hupp, promoted to executive sales engineer, Bendix Products Division, Bendix Aviation Corp., South Bend, Ind.



General Expressways, Inc., (Ill.), Seaboard General Expressways, Inc., and General Expressways, Inc., (Iowa) have received ICC approval of a plan to eventually merge the three fleets into one company to be known as General Expressways, Inc.

Eazor Express, Inc., Pittsburgh, Pa., has ICC Division 4 approval to purchase Associated Freight Forwarders, Inc., and L & H Transportation Co., both of Pittsburgh.

Consolidated Freightways, Portland, Ore., is doing some more consolidating. It has purchased Canadian Freightways, Ltd., Calgary, Alberta, Canada, and plans purchase of Coast Freight Lines, Coos Bay, Ore., Beardmore Transfer Line, Spokane, Wash., and Model Truck and Storage Co., Bellingham, Wash.

(TURN TO NEXT PAGE, PLEASE)



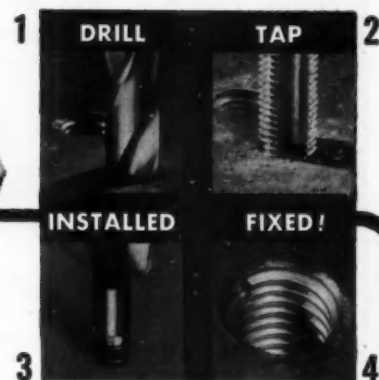
"There's an extra buck in it if you make out like I'm pushing you!"

COMMERCIAL CAR JOURNAL, October, 1955

STUCK, LOOSE, BROKEN, STRIPPED THREADS? MAKE SIMPLE, SAME-SIZE REPLACEMENTS



on the spot
with
HELI-COIL®
Shop-pack



Now you can replace rusted, busted, worn out, torn out threads due to broken bolts, frozen studs, excessive wear, etc., *on the spot*. Drastically cut downtime, mechanics' time, eliminate welding and plugging! *Heli-Coil Shop-pack* gives you an economical, quick means of permanently replacing any thread size from 6-32 to 1½-6 in N.F. and N.C. series (available also in pipe thread sizes)... in any machine tool, engine, vehicle, appliance, building or furnishing you use, operate or service.

All you do is (1) drill out the hole, including stub of broken screw or stud; (2) tap new threads with the *Heli-Coil* tap; and (3) wind in a *Heli-Coil* Insert using the inserting tool provided. The result is a permanent, back-to-original size, stronger-than-ever repair... made in minutes!

It's as simple and sure as that. There is a *Heli-Coil Shop-pack* for every size thread. Each contains a tap, inserting tool and a generous supply of *Heli-Coil* Inserts, and full instructions. Call your supplier or mail the coupon today for Shop-pack details.

*Reg. U.S. Pat. Off.



HELI-COIL CORPORATION

590 Shelter Rock Lane, Danbury, Conn.

Please send me Bulletin No. 724A on the NEW Shop-pack.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

1418

October News Roundup

Continued from Page 189

Barber Transportation Co., Rapid City, S. D., won the top Trailmobile trophy in the state's annual safety contest. Other winners included: C&R Transfer Co., Sioux Falls; Dakota Film Service, Inc., Sioux Falls; Dan Dugan Oil Transport Co., Sioux Falls; Midwest Coast Transport, Sioux Falls; and Buckingham Transport, Rapid City.

Dan Dugan Oil Transport Co., Sioux Falls, S. D., has made available two \$500 scholarships for 1955 high school seniors.

Cooper Motor Lines, Greenville, S. C., has added 44 new high cube trailers to its 400-unit fleet.

Ryder System, Miami, Fla., parent organization of Great Southern Trucking Co., is planning purchase of T. S. C. Motor Freight Lines, Houston, Texas; Miller Motor Lines of North Carolina; Cooper Motor Lines, Green-

ville, S. C.; and Emmott-Valley Transportation Co.

Akers Motor Lines, Gastonia, N. C., has contracted with RCA for installation of two-way radios in 220 pickup and delivery trucks in 24 terminals.

Wilson Truck System, Sioux Falls, S. D., has purchased 18 high volume, 35-ft., tandem-axle trailers.

Ringsby Truck Lines, Denver, Colo., plans purchase, subject to ICC OK, of Inland Freight Lines, Salt Lake City, Utah; Eastern Utah Freight Transportation; and Unitah Freight Lines.

Harrisburg Railways Co., Harrisburg, Pa., has received National Safety Council's "Award of Honor" as the first transit company to accumulate 3½ million consecutive man-hours without a lost-time accident.

England Bros. Truck Lines, Fort Smith, Ark., and Red Ball Motor Freight, Dallas, Texas, have been authorized by the ICC to take over operating rights of North East Texas Motor Lines.

Bell Lines, Charleston, W. Va., has ICC approval to purchase the operating rights of Lowther Trucking, Charlotte, W. Va.

Lyon Van and Storage, Los Angeles, Cal., will soon put two new warehouses into service, one in Los Angeles and the other in San Francisco, Cal.

Central Express, Fort Smith, Ark., has ICC Division 4 OK to purchase Elliott Freight Lines, Muskogee, Okla.

(TURN TO PAGE 192, PLEASE)



NO. 750 COPPER TUBING DISPENSER

look at world's first copper tubing dispenser

- ★ First "layer wound" coil of copper tubing... unwinds like thread from a spool
- ★ First coil of copper tubing wound on a steel spool
- ★ First stocking unit for copper tubing... no more broken packages
- ★ First automatic tubing straightener... it straightens as it uncoils... no kinks
- ★ First coil of automotive copper tubing marked every foot
- ★ First 100 foot coil of automotive copper tubing... 10½" diameter... saves space
- ★ First copper tubing waste eliminator (no more odd lengths laying around)

saves space and dispenses

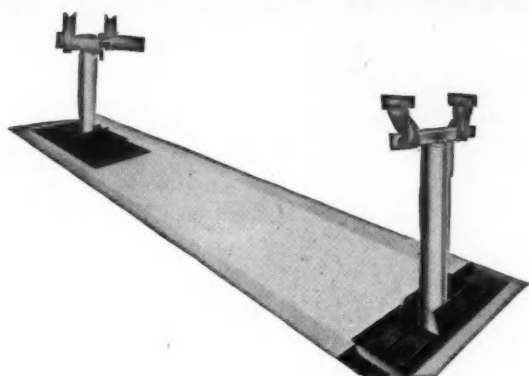
100 foot spools of 3/16", 1/4", 5/16", 3/8"... and 50 foot spool of 1/2" copper tubing. • Each spool can be independently removed and carried to the job. • 100 foot spool of 1/8" also available (optional). • Handy place for tubing cutter. (Cutter optional). • Available through all leading automotive wholesalers. DORMAN PRODUCTS INC., Cincinnati 2, Ohio.



Trucking Along . . .

The tax collector was rough on truck owners back in the first century BC in the city of Rome, according to ancient writings which record a plea made by one Luculus Arenii, a wealthy fleet operator of the day, to the Senate. He wanted the special road tax of 100 silver pieces per vehicle reduced, especially since, as he pointed out, private vehicles which were often as large as his professional trucking type, paid only 15 silver pieces. The document further states that, after considerable debate, the tax was reduced to 80 pieces of silver, but was restored to the former amount the following year. Several of the smaller independent truckers stepped out of business as a result.

Make your shop more efficient with modern *Curtis* service equipment



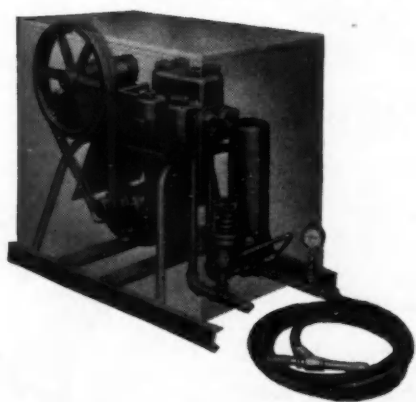
TWO-POST SHOP LIFT— FOR PASSENGER CARS AND LIGHT TRUCKS

Lower installation cost—no long, deep pit required... 60" wheel base range, 72" rise provides ample head room. Deep front yoke for greater front-end accessibility.



TANK-MOUNTED AIR COMPRESSORS $\frac{1}{4}$ to 15 H.P. Inclusive

From 1 to 78 cubic feet displacement (also simple and base-mounted units up to 300 cu. ft.) Single and two stage... Timken bearings... self-oiling. ASME National Board 200 lb. tank. Positive unloader protects motor.



HIGH-PRESSURE HYDRAULIC WASHER

For faster, better, more profitable wash jobs. Provides 300 lbs. pressure. Long-lasting, self-oiling pump with brass-lined cylinders. Easy accessibility... quiet running... precision built.

FOR FULL FACTS AND PRICES WRITE—

Curtis PNEUMATIC MACHINERY DIVISION

of Curtis Manufacturing Company • 1970 Kienlen Avenue, St. Louis 20, Missouri

OTHER CURTIS PRODUCTS: Industrial Air Compressors and Air Hoists, Commercial and Home Air Conditioning

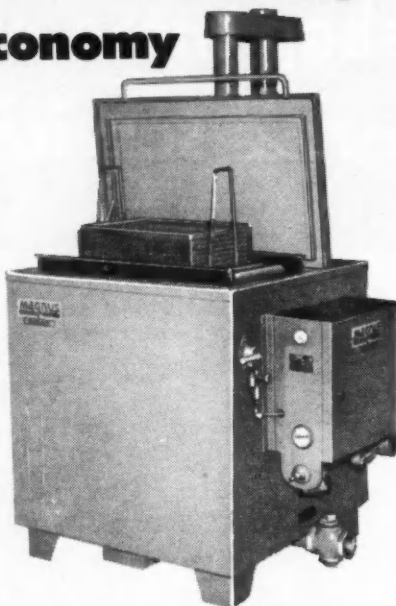
CM-835

Air-powered Parts Cleaning for Speed and Economy

Load carburetors, pumps, disassembled parts in baskets at waist level. Push a button . . . and the cleaning job is done automatically. Work is automatically returned to waist level.

The Magnus Aja-Lif Cleaning Machine is powered by air—no motors are used. Whether you clean with alkalies like Magnus 63 or with emulsifiable solvents like Magnus 755, you get faster, more thorough cleaning, even where the job is the removal of tough carbonized oil. And the cost is much less.

The work is rapidly agitated up and down IN the cleaning solution, adding powerful mechanical action to the chemical effect of the solution.



Let us explain in detail how this method of vigorously agitating the work in the cleaning solution saves both time and money. Ask for Bulletin 704-AL.

MAGNUS CHEMICAL CO., INC.

38 South Ave., Garwood, N. J.

In Canada: Magnus Chemicals, Ltd., Montreal
Service Representatives in Principal Cities



Here's a Money Saving Service on Camshafts



- Quick Service
- Satisfaction Guaranteed

Standard's exclusive camshaft service reconditions worn camshafts—good as new in specifications, performance, and service—at a considerable saving to you. A Mack Model 672, for instance, is reconditioned for about \$30.00.

Standard's "Chromaloy" process and technique have been thoroughly tested and proven on hundreds of thousands of camshafts of all sizes. Some of America's largest truck transportation firms have been using this service without a single failure of any kind.

Let us give you full details and prices, or send us a worn camshaft to recondition.

Standard Crankshaft & Hydraulic Co., Inc.

2917 Rozzells Ferry Road, Charlotte, N. C., Phone: FR 6-2374-5-3469

October News Roundup

Continued from Page 190

Terminal Transport, Atlanta, Ga., has added 65 Fruehauf high volume trailers to its fleet. Nylon tarpaulins are used on the 15 open-tops included in the purchase.

Pacific Intermountain Express, Oakland, Cal., has announced that it expects to spend \$1½ million on its new Los Angeles, Cal., terminal.

Eastern Motor Express, Terre Haute, Ind., is putting into service 80 Mack Model No. B-65 tractors, designed to conform with state weight requirements including the recent increase in Pennsylvania's laws.

Mid-Continent Freight Lines, Oklahoma City, Okla., has purchased Luper Freight Lines, Tulsa, Okla.

Inter City Trucking, Memphis, Tenn., will be bought by ET & WNC Transportation, Johnson City, Tenn., under a plan recently approved by ICC's Division 4.

Gateway Transportation Co., La-Crosse, Wis., was awarded the top Trailmobile trophy in the state's annual safety contest. Other winners in the contest included Olson Transportation, Green Bay; Joerns Bros. Furniture Co., Stevens Point; L. G. Arnold, Inc., Eau Claire; Connor Lumber & Land Co., Laona; Milwaukee Motor Transportation, Green Bay; J. W. Cartage, Milwaukee; Socony-Vacuum Oil, Milwaukee; Beaver Transport, Beaver Dam; and Hart Motor Express, Minneapolis, Minn.

Dixie Highway Express, Meridan, Miss., for the second year in a row, (TURN TO PAGE 194, PLEASE)



"Actually it is a gasoline can—it holds one full gallon!"

COMMERCIAL CAR JOURNAL, October, 1955

In your shop coated tar easily in a them away cemented applied in Ease of money-sav coated nyl

BETTER THING ... THR COMMERCIAL

ANOTHER REASON WHY TRUCKERS LIKE COATED NYLON TARPS



EASE OF REPAIR...

**coated tarpaulins of Du Pont nylon can be repaired
in a matter of minutes**

In your shop, on a truck or even on the road, coated tarps of Du Pont nylon can be repaired easily in a matter of minutes! No need to send them away for costly stitched-patch repairs. A cemented patch like that shown here can be applied in about half an hour.

Ease of repair is just one of many time- and money-saving advantages you can expect with coated nylon on the job. They are lighter—one-

third to one-half the weight of regular tarps—and more flexible. This means quicker, more efficient handling. Coated nylon is *waterproof*, not just water-repellent. And coated nylon resists rot and mildew . . . an important reason why it lasts two to three times as long.

See how coated nylon tarps can save you time and money. Ask your supplier for complete information or write: Du Pont Company, Dept. C-10, 11506 Nemours Building, Wilmington 98, Del.



REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

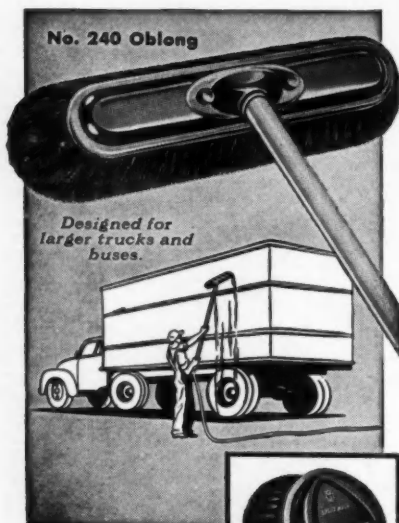
For longer life and easier handling—

Coated Truck Tarpaulins of DU PONT NYLON

COMMERCIAL CAR JOURNAL, October, 1955

193

SPEED WASH Outlasts 3 Ordinary Fountain Brushes



NOT even three ordinary fountain brushes can match the long lasting performance that results from the superior construction and design of Speed Wash. Soft, resilient bristles (50% Nylon, 50% Select Horsehair) can't mat or tangle. Tufts are molded into block, can not come out or come loose. Steel back is waterproof and surrounded by a mar-proof bumper. Handle is zinc plated inside and out. Features like these make Speed Wash the quality brush of the trucking industry, preferred by thousands of the nation's biggest fleet operators. You'll like Speed Wash, too. Order yours today.

Complete with 5 ft. handle	PRICES EITHER STYLE IN LOTS OF:			
	1	6	12	24
	\$12.45	\$11.65	\$10.90	\$10.15

MILWAUKEE DUSTLESS BRUSH CO.
530 North 22nd St., Milwaukee, Wis.

Please ship the following:

Quan.	No.	Item	Price
	240	OBLONG SPEEDWASH	
	250	ROUND SPEEDWASH	

NAME _____

ADDRESS _____

CITY _____ STATE _____

October News Roundup

Continued from Page 192

won the top Trailmobile trophy in the state's annual fleet highway safety contest. Other winning fleets included L. L. Majure Transport, Meridan, and Miller Petroleum Transporters, Jackson.

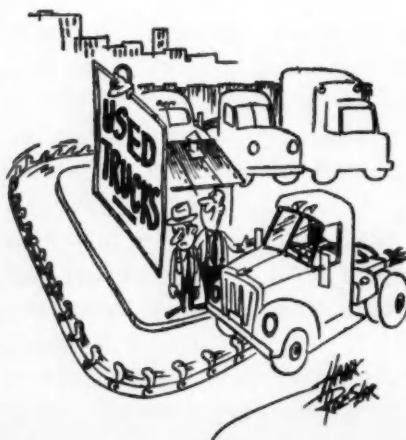
Consolidated Freightways, Portland, Ore., has asked for ICC approval to purchase the irregular route heavy hauling authority of Arrowhead Freight Lines, Los Angeles, Cal.

T.I.M.E., Lubbock, Texas, last month used newspaper advertising in all of its terminal cities to caution drivers that schools had started. The ads also told motorists that T.I.M.E. drivers had been especially alerted to the hazard.

F. J. Boutell Driveaway, Flint, Mich., had an unusual winner in the state's truck rodeo. It was the accident prevention slogan, "The Accident You're Concerned About—Won't Happen!" It was entered in the contest by the fleet's Accident Control Division Director John W. Jacobson.

Pacific Intermountain Express, Oakland, Cal., has ordered 20 "XD-30" dromedary tractors, 10 to be built by Kenworth Motor Truck Corp. and 10 by Peterbilt Motors Co. This PIE-designed unit has tandem steering axles, air springs and pancake diesel engine mounted under the "dromedary" cargo body. Also on order are 10 tank combination power units from Peterbilt, 40 aluminum flat bed trailers and 95 roll-top trailers from Strick, and 100 high volume dry freight vans

(TURN TO PAGE 196, PLEASE)

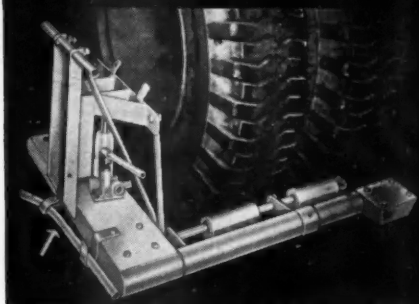


"Care to take a trial spin around the block?"

Cut Wheel-Changing
Labor Costs in Half!

KEN E-Z LIFTING TRUCK WHEEL DOLLY

CHANGES TRUCK WHEELS
FASTER - EASIER



IMPROVED DESIGN No. T-105

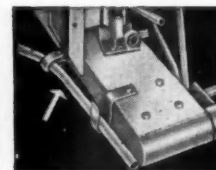
No more back-breaking wheel handling! Now one man can remove and replace single or dual truck wheels with this improved hydraulic lifting dolly. You get your trucks back on the job faster . . . at less cost.

Check these time-saving,
money-saving features!



Two hooks raise automatically behind wheels to prevent the wheels from slipping off dolly.

Pivoted roller spindles allow rocking motion to line up hub with axle.



Rear booster bar helps loosen bearings for removing wheels — also starts the brake drum into the shoe when replacing wheels.

Easily removes dual and single wheels up to 12" x 24" sizes and truck wheels up to 48" diameter.

E-Z Lift is mounted on four high-quality, easy-rolling casters, 4" in diameter.

Write for catalog or see your jobber.

THE KEN-TOOL MFG. CO.
AKRON 5, OHIO



Hour after hour of nagging glare



**can wear your drivers down
unless your trucks have E-Z-EYE**

Your drivers can travel farther and faster, more safely when their eyes are protected by a shaded E-Z-EYE Safety Plate Glass windshield. When you buy a new truck, tell your dealer you want E-Z-EYE Safety Plate Glass. For further details, call your Libbey-Owens-Ford Distributor (listed under "Glass" in phone books), or write Dept. 54105, Libbey-Owens-Ford Glass Company, 608 Madison Avenue, Toledo 3, Ohio.



E-Z-EYE SAFETY PLATE

with the shaded windshield



Reduces Glare, Eyestrain, Sun Heat

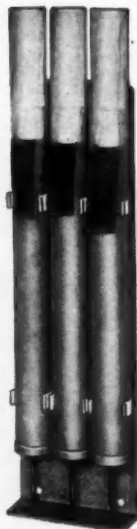
FOR DEPENDABILITY

Kilgore

"INTERNATIONAL"

AUTOMOTIVE

FUSEES



- Faster Starting
- Full Burning Time
- Brighter Red Color
- Heavy Water-Proofing
- Plastic Base Plug

For more than a quarter of a century Kilgore "International" has been the standard of quality for automotive and truck fusees. When you need a fusee you must have confidence that it will operate with maximum efficiency. That's Kilgore! Available with or without spikes, wire stands or cab bracket.



Approved by Underwriters Laboratories, Meets Bureau of Explosive Specifications.

Kilgore

INC.

Westerville, Ohio

October News Roundup

Continued from Page 194

and 25 tank trailers from Fruehauf. Says PIE, the new dry freight vans are similar to the high volume models bought a year ago, except they are about 2000 lb lighter.

Spector Freight System, Inc., Chicago, is the new name of Spector Motor Service, Inc.

Ringsby Truck Lines, Denver, Colo., and Buckingham Transportation, Rapid City, S. D., have announced through trailer service between Los Angeles, Cal., Rapid City, S. D., and Minneapolis, Minn.

Yellow Transit Freight Lines, Kansas City, Mo., is putting into service 200 Kenworth tractors and 400 Fruehauf trailers. The tractors are of cab-beside-engine design, are powered with Cummins' 175-hp, JT-600 turbo-charged diesel engine. The trailers are all hi-cube models, include 310 dry freight vans, 20 insulated vans, 40 reefers with Thermo-King refrigeration units and 30 open tops.

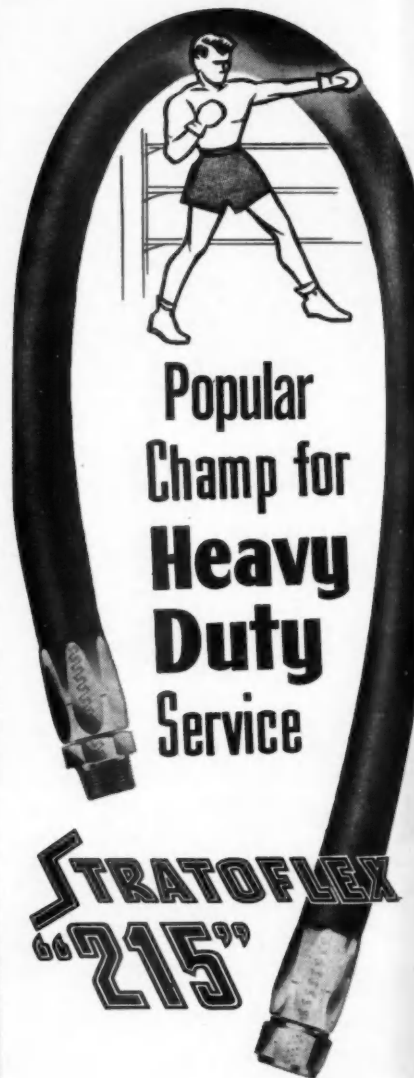
Eastern Motor Express, Terre Haute, Ind., has put into service 65 International Harvester trucks and 55 Fruehauf, hi-cube trailers. Axles on the trailers can be moved from a 51-in. to a 105-in. setting.

Refrigerated Transport, Atlanta, Ga., has awarded \$1600 scholarship to Jerry Whiteside of Aragon, Ga., for his 4-H Club work.

Security Cartage, Fort Wayne, Ind., has purchased 85 cab-over-engine
(TURN TO PAGE 198, PLEASE)



"Listen to that engine! The farther we go, the more power she seems to have!"



INDUSTRIAL HOSE AND FITTINGS

Super resistance to abrasion and corrosion makes this hose excellent for railroads, road equipment, farm machinery, and materials handling equipment. High tensile strength single wire braid. Tough synthetic rubber cover. Working pressures to 2500 psi. Bulk hose and fittings . . . complete hose assemblies at your dealer.

Write for BULLETIN
Dealerships open
in some areas.



STRATOFLEX, INC. FORT WORTH, TEXAS
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LOS ANGELES AND TORONTO
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STRATOFLEX OF CANADA, INC. TORONTO 18, ONTARIO



*Geometrically
Perfect*

HOMAN ALUMINUM DISC WHEELS FORGED BY ALCOA®

Homan Aluminum Disc Wheels are forged to assure maximum strength. Homan Aluminum Disc Wheels are precision machined and are ROUND. True running wheels increase tire life.

Other Advantages:

- light weight means greater payloads
- aluminum dissipates heat rapidly
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Specify Aluminum Disc Wheels on your new equipment and change-over.

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Established 1847

Aluminum and Steel Wheels, Aluminum and Steel Landing Gears,
Brake Drums, and The Homan Air-Ride Tandem

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For Fast,
Dependable
Service Ship By
Truck Trailer

There are a few
distributor terri-
tories open.

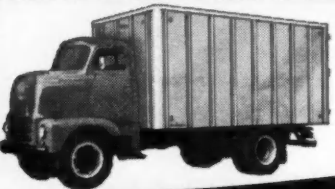
WEATHERTIGHT



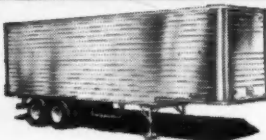
LIGHTWEIGHT ALUMINUM BODIES & TRAILERS



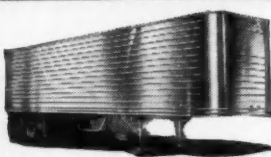
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Andrews EXTERIOR POST



Andrews "BIG MO"



Andrews ALL ALUMINUM

Water problem? Andrews trailer and truck body doors are double sealed and pressure locked! Balloon rubber gaskets seal doors extra tight! Lightweight, low cost, extra strong aluminum construction. For prices, specifications call or write. 59 Distributors, nationwide, to serve you.

Andrews

TRAILERS and TRUCK BODIES

P.O. Box 418

St. Louis, Mo.

October News Roundup

Continued from Page 196

tractors with twin screw tandems and 20 new hi-cube trailers.

Consolidated Freightways, Portland, Ore., has obtained ICC Division 4 approval to purchase rights and properties of Coast Freight Lines, Coos Bay, Ore.

Chemical Tank Lines, Downingtown, Pa., has obtained ICC Division 4 approval to purchase the rights and properties of Liquid Transport, Akron, Ohio.



Fleets awarding their outstanding, safe drivers recently include:

Martins Truck, Inc., Plattsburg, N. Y.—to 14 drivers. Eight have safe driving records of three years or more.

Kilgo Motor Freight Lines, Charlotte, N. C.—to 19 drivers. Total safe truck driving record of the group is 6.9 million miles.

Overseas Transportation, Miami, Fla.—to 17 drivers. Nine of the driv-

(TURN TO NEXT PAGE, PLEASE)

**Our customers
want the
best!**



**COVER 70% OF ALL
MAKES OF TRUCKS
AND BUSES ARE**

Zoller EQUIPPED

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HEAVY DUTY PISTONS



RH2c

Equip your fleet with PAC-KIT®



... "first aid" for goodwill

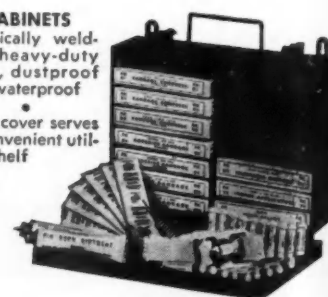
A truck or bus is often first on the scene of a highway accident. In such emergencies, an adequate selection of first aid supplies, instantly available, can provide beneficial relief to the injured until a physician or ambulance can be summoned.

Then too . . . there's the matter of constant protection for your own personnel at any time of day or night . . . anywhere.

CABINETS

Electrically welded, heavy-duty steel, dustproof and waterproof

Drop cover serves as convenient utility shelf



4 AVAILABLE SIZES — containing from 10 to 36 replaceable packets, as indicated by potential hazard.

Contents of PAC-KITS

include first aid accessories for

- FAINTING
- BURNS
- TRAUMATIC HEMORRHAGE
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- EYE INJURIES

WRITE TODAY for complete descriptive literature and prices

The PAC-KIT Company

P. O. BOX 1306 • GREENWICH, CONN.

October News Roundup

Continued from Page 198

ers have records of four years or more of safe truck driving.

Inland Freight Lines and Unitah Freight Lines, Salt Lake City, Utah—to 24 drivers. Special citations went to two drivers with 15-year records.



The White Motor Co., Cleveland, Ohio, has consolidated its former Eastern and North Atlantic Regions into a new, single Eastern Region. Headquarters will be at 547 West 47th St., New York City. The new region will handle both White and Autocar sales and service.

Powell Muffler Co., Chicago, has appointed The John H. Palm Co. as sales representative in Chicago and the state of Illinois.

Houdaille-Hershey Corp. has opened its new executive offices at 1280 Main St., Buffalo, N. Y. Automotive sales and engineering offices will remain in Detroit.

Fruehauf Trailer Co.'s Fruehauf-Carter plant, Memphis, Tenn., won top award in the 1954 Plant Safety Contest of Truck-Trailer Manufacturers Assn. Other winners included Trailmobile, Inc., Cincinnati, Ohio; Hobbs Mfg. Co., Fort Worth, Texas; Dorsey Trailer Co., Elba, Ala.; and Fruehauf plants in Avon Lake, Ohio, and Fort Wayne, Ind.

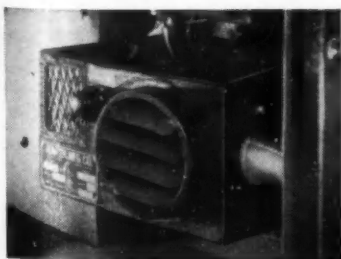
Binks Mfg. Co., Chicago, has announced three, free one-week training courses in spray painting this fall. Dates are Oct. 3 through Oct. 7, Nov. 7 through Nov. 11 and Dec. 5 through Dec. 9. The only costs are transportation and living costs while attending the school. For information, write Binks Mfg. Co., 3122 Carroll Ave., Chicago 12, Ill.

General Motors' GMC Truck and Coach Division and Studebaker-Packard Corp. have military truck orders. GMC's \$12½ million contract is for 6x6 vehicles with Hydra-Matic transmission and replacement parts for (TURN TO NEXT PAGE, PLEASE)



**An
Important
Man**
DESERVES THE BEST

HUNTER Gasoline-Burning Heaters FOR GAS OR DIESEL RIGS



- Sure safe heat, thermostatically controlled
- Shirtsleeve warmth in coldest weather
- Sub-zero starting, unfailing combustion
- Conform to all ICC regulations
- Operate independent of vehicle engine
- Eliminate costly engine idling
- Economical, compact, easy to install



Write for descriptive literature, specifications, prices.

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NEW LUBER-FINER INDUSTRIAL MODELS ANNOUNCED



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**MODELS
272-C
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FOR MOBILE
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ENGINES**

With up to 3 & 4 Gal.
Crankcase Capacities

NOTE: All Luber-finer Models may be used on engines larger than recommended; however, the Pack life will be proportionately shorter.



CHECK ALL THESE EXCLUSIVE LUBER-FINER FEATURES

- **SINGLE BOLT CLOSURE**—Ingeniously designed Clamping Ring utilizes Single Bolt Closure for quick, easy Pack Replacement.
- **POSITIVE SEALING GASKET**—Long-lasting "O" ring type gasket assures leak-proof lid closure at all operating pressures.
- **POSITIVE PACK SEAL**—An outstanding feature that eliminates the possibility of oil ever by-passing the Luber-finer pack.
- **DUAL SAFETY VALVES**—Prevents oil drain-back, assuring exact crankcase oil level reading at all times, stops oil from circulating through unit if lines are reversed or if the Luber-finer Unit is otherwise improperly installed.

Luber-finer Units are Standard and Optional Equipment on America's Leading Diesel Trucks, Tractors and Stationary Engines



AND DON'T FORGET!
For Luber-finer's Engineered Protection — Be Sure There is a Genuine
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PACK INSIDE!**

Only a Luber-finer Unit plus a Genuine Luber-finer Pack can give you the Exclusive Patented Filtering Process that has made Luber-finer the Standard of the Industry since 1936!

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TRUCK TIRE
DEMOUNTER**

\$89.50

removes, safely
and easily, frozen
or stuck casings from
rim in minutes. Features
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Handles all size truck tires,
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MAIL ORDERS OR REQUESTS FOR FURTHER
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**The Tube Coupling with the Vibration and
Shock Absorbing Sleeve.**

**IMPERIAL
FLEX FITTINGS**

*Ideal for trucks and fleets
because they stand up under*

**MAJOR VIBRATION
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MINOR TUBE
MOVEMENT**

This Synthetic Elastic
Sleeve Absorbs Vibration
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assures a positive pressure-
tight seal...stands
up under the most
severe operating
conditions.



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IMPERIAL

more payload
with
Lintern
LIGHTER WEIGHT
STEP, SADDLE, &
CYLINDER TANKS

THE LINTERN CORPORATION
ROUTE 20, EAST • PAINESVILLE, OHIO

October News Roundup

Continued from Page 199

WW II GMC trucks. Studebaker has an \$8 million contract for 2½-ton, 6x6 units.

Gramm Trailer, Lima, Ohio, has been named exclusive distributor of nailable steel flooring to the truck-trailer industry by Great Lakes Steel Division, National Steel Corp.

The Borden Co.'s Chemical Division has acquired American Monomer Corp., and will continue manufacture of "Fleetline" anti-freeze.

Leece-Neville Co., Cleveland, Ohio, has opened its new plant in that city located at 1374 East 51st St.

The Texas Co., New York City, has opened a new technical service headquarters in Pittsburgh, Pa. Address is Rm. 5, South Bldg. No. 1, Gateway Center.

AC Spark Plug Division, General Motors Corp., Flint, Mich., will add a new 250,000-sq ft building to its present Flint plant.

Duplex Truck Co., Lansing, Mich., will become a division of Warner and Swasey Co., Cleveland, Ohio, if plans for the deal are OK'd by Duplex stockholders.

Borg-Warner Corp., Chicago, has plans in the works to develop a 36½-acre site in Des Plaines, Ill., as a fully equipped B-W Research Center.

General Truck Sales, Miami, Fla., (GMC truck dealership) has moved into its new building. It provides room for 600 trucks, has 60,000 sq ft under roof. Equipment and facilities include 80-ft long grease pits, chassis dyna-
(TURN TO PAGE 202, PLEASE)

Classified Advertisement

TRUCK DECALS—representative for new plastic Decals for Trucks. Longer life. More brilliant. Economical. Give complete details—Allied Decals, Inc., 8420 Hough Avenue, Cleveland 3, Ohio.

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Always Better

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There are now
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Water Pumps
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**MOTOR TRUCKS
CRANE CARRIERS
CUSTOM BUILT CHASSIS
GENERATOR SETS**

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from
**60 to 750 Cu. In.
Capacity**

...and Cartridges for
all makes of Filters.

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First By Test Since 1931 KINGSTON, N. Y.

**FRINK
SNO-PLOWS**

Both "V" TYPE and
ONE WAY BLADE TYPE
hand or power hydraulic control
FOR ALL MOTOR TRUCKS
FROM ½ to 10 TONS

FRINK SNO-PLOWS, INC., CLAYTON, 1000 Isl., N.Y.

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ALLSTEEL BODY CO.
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the sign of quality on

DUMP BODIES OF ALL TYPES
HYDRAULIC HOISTS
HYDRAULIC END-LOADERS
PACKER-TYPE REFUSE BODIES

THE GALION ALLSTEEL BODY COMPANY • GALION, OHIO



On the assembly line of a leading automobile manufacturer, workers are installing Johnson bearings in a popular six-cylinder engine.

When you rebuild an engine—use the same quality bearings that were used originally

Johnson is an important manufacturer and supplier of bearings for the engines made on leading automotive production lines. The experience gained in producing bearings for auto manufacturers is put to good use when Johnson makes bearings for rebuilding engines, transmissions and other components. The size tolerance, surface finish and chemical analysis all are equal to those made for original equipment. Easy to

insert, they have the stamina to give long service.

When you need bearings and bushings to rebuild engines and other parts, your Johnson jobber can supply you quickly and at a reasonable price. His stock is backed by large inventories in 24 Johnson warehouses from coast to coast. Try your Johnson distributor the next time you need replacement bearings. Johnson Bronze Co., 640 Mill St., New Castle, Pa.



Johnson Bearings

October News Roundup

Continued from Page 200

mometers, frame straighteners, 80-ton presses, 250-lb nozzle pressure steam cleaners, cleaning tanks and an 80-ft long complete engine overhaul system.

Heil Co., Milwaukee, Wis., has appointed Brown Equipment Co., Coalville, Utah, as distributor for milk transport tanks, farm pick-up tanks

and related equipment for the entire state of Utah.



Alabama—Commercial trucks and combinations owned by non-residents are to be registered as non-resident

vehicles under Sec. 707, Title 51 of Code (H355). Tax is imposed in Mobile County on gasoline and other motor fuels except kerosene (H952). Changes have been made in the laws affecting motor vehicles transporting property when person furnishing transportation is legally and regularly engaged in selling property and is owner of motor vehicles involved (H688). Highway Dept. is authorized to issue special permits for certain oversize vehicles (H834). New type sealed-beam headlamps have been approved (H295).

Colorado—A legislative study committee has been told that the state's system of ports of entry has been successful in increasing revenues from truck taxes. Two bills have been proposed to expand the port of entry system. The first would permit Highway Dept. to establish truck routes, and the second would enable the Revenue Dept. to require trucks to use these routes and clear through designated ports of entry.

Connecticut—Provision has been made for licensing (\$5 annual fee) and regulation of motor vehicle leasing or renting business (H687).

Massachusetts—Weight limit for 2-axle vehicles is increased to 44,800 lb, for 3-axle vehicles (with tandem-axes over 6 ft apart) or vehicle combinations to 60,000 lb. A table of axle spacing based on the formula of 1000 (L plus 25) (S539).

New York—City and state police have begun checking trucks in New York City for enforcement of the state's ton-mile tax as well as city traffic laws.

Pennsylvania—Gasoline and use fuel tax have been increased to 6¢ per gal for a 2-year period beginning Sept. 13, 1955 (H1744 and H1745). Buses are permitted an 102-in. width on highways 20-ft or more wide when approved by the Public Utilities Commission (for buses traversing more than one political subdivision) or by the municipality (for buses operated wholly within such municipality) (H629).

END

Please Resume Reading Page 100

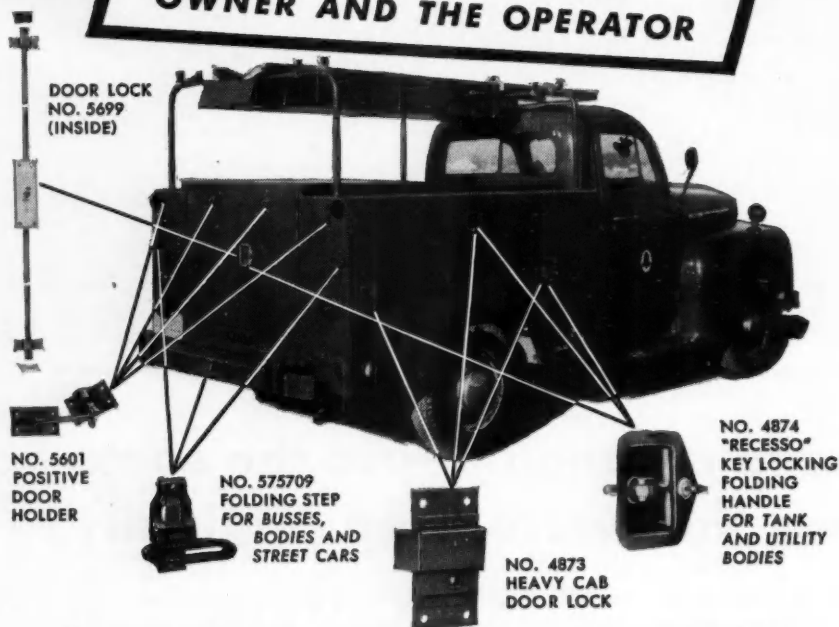
Safety Sadie: "Cora, have you heard 'My Lonely Heart'?"

Catty Cora: "No, but if the neckline of the dress you're wearing was any lower, I could see it."

COMMERCIAL CAR JOURNAL, October, 1955

Completely "E"berHARDWARE"

TO BETTER SERVE THE
OWNER AND THE OPERATOR



It's performance that promotes a preference for Eberhard truck body hardware.

Long life and functional operation of each "E" item, on the job day in and day out. Each lock, hinge, door holder or item performing its intended service to the advantage and satisfaction of owner and operator alike.

That's why "up and going" body manufacturers like Woerber Auto Body & Mfg. Co. of Denver, Colo. can rely upon Eberhard for a typical body job as shown here.

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